

No. 20662

United States
COURT OF APPEALS
for the Ninth Circuit

JEDDELOH BROTHERS SWEED MILLS,
INC., a Corporation,
OTTO JEDDELOH, FRED JEDDELOH,
v. *Appellants,*

COE MANUFACTURING COMPANY,
a Corporation, *Appellee,*

COE MANUFACTURING COMPANY,
a Corporation, *Appellee and Cross-Appellant,*
v.

JEDDELOH BROTHERS SWEED MILLS,
INC., a Corporation,
OTTO JEDDELOH, FRED JEDDELOH,
Appellants and Cross-Appellees.

*Appeal from the United States District Court for the
District of Oregon—Civil No. 9702 (Judge Solomon)*

OPENING BRIEF FOR APPELLANTS AND CROSS-APPELLEES

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- The record in this case comprises four volumes:
- Vol. I Printed record in prior appeal No. 17055.
 - Vol. II Book of exhibits in prior appeal No. 17055.
 - Vol. III Xerox copy of Clerk's record in present appeal.
 - Vol. IV Xerox copy of transcript of hearings in present appeal.

Citations to material in the above-identified volumes will be to a Roman numeral followed by a decimal number which indicates the volume and page, e.g., II.27 refers to Vol. II, page 27.

The following abbreviations are used:

PX plaintiff's exhibit.

DX defendants' exhibit.

App. followed by a number refers to a page in the appendix to this brief.

For convenience, a copy of the patent in suit (PX 2, II.332), patent drawings of the accused machine (DX 123, II.588) and a copy of defendants' rejected exhibit 129 are included at the back of this brief at App. 5, 20, 3-4, respectively.

All emphasis throughout this brief is ours, unless otherwise indicated.

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JURISDICTION

This is a suit for infringement of United States Letters Patent Re. 24,638.¹ Jurisdiction of the District

¹ Supplemental Complaint, I.3.

Court was founded on 28 U.S.C. § 1338(a) and 35 U.S.C. § 281. A judgment of the District Court was entered on May 21, 1965² and a motion for new trial or amendment of judgment was filed on June 1, 1965.³ An order denying the motion for new trial and amendment of judgment was entered August 16, 1965,⁴ but that order was vacated by an order entered August 26, 1965.⁵ On October 6, 1965, the District Court entered judgment and order fixing reasonable royalty specifying, paragraph (3), that defendants give notice of appeal and file supersedeas bond on or before October 16, 1965.⁶ On October 14, 1965, the District Court approved defendants' supersedeas bond⁷ and defendants filed their notice of appeal.⁸ Plaintiff filed its notice of cross-appeal on October 19, 1965.⁹

Jurisdiction of this Court is invoked under 28 U.S.C. §§ 1291 and 1294(1).

STATEMENT OF THE CASE

This brief is in support of defendants' appeal from a judgment entered by the District Court (Judge Solomon) holding valid and infringed claim 17 of Parker patent Re. 24,638, "Apparatus for Handling Veneer," which was reissued to plaintiff on April 21, 1959 on ap-

² III.27

³ III.29

⁴ III.40

⁵ III.43

⁶ III.49

⁷ III.52

⁸ III.50

⁹ III.54

plication for reissue filed October 23, 1958, and awarding damages to plaintiff.

The history of this case goes back to 1958, and a chronological listing of certain important events follows:

- Mar. 20, 1958: Complaint filed under patent No. 2,649,182.
- May 14, 1958: Answer filed.
- Oct. 23, 1958: Application filed by plaintiff for reissue of patent No. 2,649,182.
- Apr. 21, 1959: Patent Re. 24,638 issued.
- May 1, 1959 Supplemental complaint filed substituting patent Re. 24,638 for patent No. 2,649,182.
- May 4, 1959: Answer and counterclaim to supplemental complaint filed.
- Dec. 29, 30, 31, 1959: Trial in District Court.
- Mar. 30, 1960: First opinion by Judge Solomon.
- May 18, 1960: Notice of first appeal.
- May 2, 1961: Argument of first appeal.
- June 29, 1962: Opinion by Court of Appeals remanding case.
- Dec. 7, 1962: Trial on remand.
- May 21, 1965: Second opinion by Judge Solomon.
- Oct. 6, 1965: Judgment entered.
- Oct. 14, 1965: Notice of second appeal.

The Prior Opinions

The District Court's first opinion¹⁰ was brief because it was very clear to the District Judge at that time that there was no infringement and he made no findings with respect to validity of the patent in suit.

On appeal this Court remanded for additional findings, particularly on validity because "the question of infringement of the claims in issue is a close one, at least with regard to claim 17."¹¹

The District Court held another hearing and had the case under advisement for more than two years and "experienced much difficulty in arriving at conclusions with which I was satisfied."¹² The District Judge believed, erroneously we think, that this Court in effect directed him to find at least claim 17 to be infringed and that he had to do so even though he really didn't consider the claim infringed. Even after he handed down his opinion, the District Judge continued to have doubts concerning the correctness of his decision. At the hearing on June 14, 1965, he said:

"THE COURT: I will tell you something, I was wrong before; I may be wrong again."¹³

At the hearing on June 15, 1965, he said:

"THE COURT: What I said before is still applicable. I don't think this is a Chinese copy. You have no assurance that you are going to get the amount before a panel. I could name you a panel

¹⁰ I.39

¹¹ 306 F.2d 455, 456; III.3

¹² III.5A

¹³ IV.116

that would reverse this case without any hesitancy.”¹⁴

The District Judge was also anxious to get rid of the case once and for all and despite his uncertainties made findings with respect to damages and required defendants to post a supersedeas bond for \$165,000.00. At the hearing on June 18, 1965, the Court expressed itself as follows:

“THE COURT: Yes, because there is such a wide divergence between the Plaintiff and the Defendants. The damage issue in this case may require another appeal. Frankly, I am sick and tired of this case and once I get rid of it, I don’t want to have it any more. I want the Court of Appeals to decide every issue that is possible to decide at one time.

“MR. KOLISCH: We will undoubtedly have arguments before you on the question of what methods should be taken into consideration on the damage question.

“THE COURT: Certainly; I may conclude that I think a royalty is the fairest method of assessing damages. On the basis of profit, the royalty rate may be less than the profit. In that event, I am sure the Plaintiff would appeal and ask for the loss of profit. I don’t want it to come back here. I am going to set out with great particularity the precise basis on which I decide the damages and the reasons which motivated me in making that determination. Then if the Court of Appeals wants to amend, alter or set aside my findings, that’s all right with me, but they will have to do it. I told

¹⁴ IV.136

you earlier that you're in pretty good shape when you appeal from my case because you will have better than a 50-50 chance. I feel a little better now because my percentage has gone the other way during the last few days. Most of the cases appealed from my decisions have been affirmed."¹⁵

In its prior opinion, this Court was principally concerned with the District Court's failure to make findings on the issue of validity. The cases relied upon in the opinion, *Helbush v. Finkle*, 9 Cir., 1948, 170 F.2d 41, and *Specialty Equipment & Mach. Corp. v. Zell Motor Car Co.*, 4 Cir., 1952, 193 F.2d 515, hold that it is the better practice for a district court to pass on the question of validity, as well as that of infringement, unless noninfringement is absolutely clear. This Court considered the question of infringement of claim 17 to be close and therefore it wished to have before it findings on validity. There was no requirement that the District Court make any new or different findings on infringement which this Court expressly approved when it said "Findings of fact and conclusions of law appropriate to the issues of infringement were entered but no findings or conclusions appropriate to the issue of validity were made."¹⁶ All that was required of the District Court by way of new findings were those appropriate to the issue of validity.

The discussion of validity of the patent in the District Court's opinion indicates that it may have been overly influenced by what it considered to be the com-

¹⁵ IV.149, 150

¹⁶ III.2

mercial success of plaintiff's machine.¹⁷ In order for commercial success to have any significance at all it must be shown that whatever commercial success plaintiff's machines enjoyed was attributable to the patent itself. It is recognized that many factors other than the worth of a patent make for commercial success of a machine, not the least of which is plaintiff's position as the dominant manufacturer of plywood machinery.¹⁸

In distinguishing the Parker patent from the prior art, the District Court talked as if Parker were limited to a machine for feeding *veneer*.¹⁹ While some of the claims in the patent are so limited, plaintiff selected for trial four claims which are not limited to veneer but broadly cover *any* material in sheet form for loading into a conveyor-type machine. It was clearly erroneous for the District Court to distinguish from patents such as Streeter 1,809,456,²⁰ Cross, 640,368²¹ and Campbell 1,216,773²² on the grounds that they related to wall-board, paper and tin plate rather than veneer. Furthermore, these patents expressly suggest the use of various types of sheet material²³ and even if they did not, it would not amount to patentable invention to use or adapt old machinery for use on different material. Se-

¹⁷ III.7, 8.

¹⁸ *Heath v. Frankel*, 8 Cir., 1946, 153 F.2d 369, 371; *Foxboro Co. v. Taylor Instrument Companies*, 2 Cir., 1946, 157 F.2d 226, 233; III.7.

¹⁹ III.7

²⁰ DX 110, II.446

²¹ DX 101, II.354

²² DX 105, II.396

²³ Streeter, col. 1, l. 38; see also the claims of Streeter, Cross Campbell.

lection or substitution of material for use in a machine is not patentable.²⁴

The District Court found the Parker patent valid and said that even though all the elements of Parker "are old, in combination they achieved a significant new result which was something more than a mere advance in the efficiency or utility of a machine."²⁵ If the new result was "a mechanical feeding apparatus for veneer dryers,"²⁶ mentioned by the District Court, that is not what Parker claimed as his invention in the asserted claims. It is well established that in a case like the present one, it must be shown how the old elements functioned differently in the patented combination to produce an unexpected result.²⁷ This was never done and the opinion of the District Court does not even mention a single case on the subject.

The District Judge reaffirmed his first decision that claims 3, 5 and 7 of the Parker patent were not infringed but reversed himself with respect to claim 17 and held:

"In my original opinion and findings I concluded that the accused apparatus did not have a vertically movable assembly at the infeed end. Upon re-examination I have concluded that I erred. I now find that the accused apparatus does have a vertically movable assembly or its full equivalent at the infeed

²⁴ *Griffith Rubber Mills v. Hoffar*, 9 Cir., 1963, 313 F.2d 1, 3.

²⁵ III.8

²⁶ III.8

²⁷ *Great A. & P. Tea Co. v. Supermarket Equipment Corp.*, 1950, 340 U.S. 147; *Hutchinson v. Pacific Car & Foundry Company*, 9 Cir., 1963, 319 F.2d 756, 759.

end and that the accused apparatus does infringe Claim 17 of the patent in suit.”²⁸

In the accused equipment a separate machine for holding stacks of veneer in front of the feeder proper was held to be the full equivalent of the “vertically movable feed means having an entering end” called for in claim 17. The infringing “vertically movable assembly”²⁹ is a hoist, elevator or scissor lift which is a standard piece of equipment having uses other than with veneer feeders in plywood manufacturing plants.

The District Court’s construction of claim 17 is clearly erroneous because it is contrary to the reasonable meaning of the claim and the teachings of the Parker patent. During prosecution in the Patent Office of the patent application which resulted in the original Parker patent, plaintiff took a position with respect to distinguishing claim 17 from prior art that conflicts with its present position. Furthermore, the District Court confused the language of claim 17 with that of claims 5 and 7.³⁰ The latter two claims do call for a “feed end unit comprising . . . a vertically movable assembly” Claim 17 more specifically calls for a “vertically movable feed means having an entering end”

Finally, the District Judge withdrew his designation of a “Special Master to determine the profits realized by defendants and the damages suffered by plaintiff.”³¹ The District Judge resolved the matter himself

²⁸ III.9

²⁹ This is the language of the Court and not claim 17.

³⁰ III.9

³¹ III.11

on the basis of his finding of a reasonable royalty, and judgment was entered against each of the defendants requiring them to pay plaintiff royalties on all veneer dryer-feeding equipment which they sold, regardless of whether or not this equipment included an elevator.³²

The Patented Machine

The title of Parker Re. 24,638 is "Apparatus for Handling Veneer." However, none of the asserted claims (3, 5, 7 or 17) are limited to apparatus for handling veneer but broadly cover equipment for feeding or loading any material in sheet form into a "conveyor type machine."

The Parker patent, reprinted at the back of this brief at App. 5 discloses two embodiments — a preferred embodiment Figs. 1-8,³³ and an alternative construction shown in Fig. 9.³⁴

The preferred embodiment is made up of three units—a feed end unit *C*, a conveyor table *D*, and a discharge end unit *E*.³⁵

These three units are shown in Fig. 1 in position between a stack of sheet material such as veneer *B* and the infeed end of a conveyor-type machine such as dryer *A*. Figure 3 is an enlarged view of the three units. Feed end unit *C* at the left of Figs. 1 and 3 has frame members 40-45 in which are supported infeed pinch rolls 34, 35.

³² III.48

³³ Col. 1, l. 60

³⁴ Col. 9, l. 20

³⁵ Col. 2, ll. 39-41

The mounting for rolls 34, 35 is connected by chain 106 to hoist motor 100 which controls vertical movement of the pinch rolls. The operator of the machine periodically operates hoist motor 100 to move rolls 34, 35 so as to maintain substantial horizontal alignment between the nip of the rolls (infeed end of machine) and the top of stacks *B* so that sheets may conveniently be pushed from the stacks to the infeed rolls. Conveyor table *D* comprises a plurality of belts 120 which are driven by roll 122 towards unit *E*. One end of conveyor table *D* hangs by levers 123 from projections 125 extending from the vertically movable infeed pinch roll assembly of unit *C*. The other end of conveyor *D* is mounted in discharge end unit *E* which is similar to infeed end unit *C*. A hoist motor 100' through a chain 106' controls vertical movement in the frame of unit *E* of a mount which supports outfeed pinch rolls 35' and 122. As previously mentioned, roll 122 also serves as a driving roll for conveyor belts 120. Hoist motor 100' is automatically operated to move the outfeed rolls vertically into alignment with decks 10, 11, 12, 13 of the dryer as each deck is ready to receive sheets. Operation of the feeder in timed relationship with the dryer is maintained by means of a synchronizing unit 140 which is connected to the drive for the decks of the dryer.

The patented machine operates as follows: Stacks of sheets *B* are positioned adjacent feed end unit *C*. The operator runs hoist motor 100 to position pinch rolls 34, 35 so that their nips are in horizontal alignment with the tops of stacks of *B*. Upper roll 35 is swung away from roll 34 into dotted line position of Fig. 3. The op-

erator then pushes the top sheets from the stacks between the pinch rolls until the sheets engage stop 36. Rolls 35 are automatically moved down to engage the sheets and deposit them on moving belts 120 of the conveyor which carry them to pinch rolls 35', 122, which in turn have been positioned by motor 100' to deliver the sheets to the appropriate deck of the dryer.

In the embodiment of the machine shown in Fig. 9, conveyor table *D* and discharge end unit *E* have been eliminated and feed end unit *C* and stacks of sheets *B* have been mounted on a large, vertically movable elevator 350.³⁶ An operator stands on elevator 350 and pushes sheets into pinch rolls 34, 35, which in turn discharge the sheets directly onto decks 10, 11, 12, 13 of the dryer. Elevator 350 is automatically moved up and down via synchronizing unit 140 to align the pinch rolls with the correct dryer deck. The operator of the machine independently operates motor 100 periodically to maintain alignment between the top sheets of stacks *B* and the nips of roll 34, 35.

The Accused Machine

The accused machine ³⁷ was designed by defendant Otto Jeddelloh in 1957 as a result of a request from an operator of a plywood mill to improve on what was commercially available in the way of feeders for veneer dryers. Otto Jeddelloh looked at a veneer dryer feeder built by plaintiff and then designed the accused

³⁶ Col. 9, ll. 20-25.

³⁷ DXs 133, 134, 138, II.598, 599, 603

machine on which he ultimately obtained his patent No. 2,876,009.³⁸ The machine is a unitary machine for feeding veneer comprising³⁹ a loading mechanism 38 having a subframe or tippie 37 which is pivotally supported at 36 within the frame. Cam 101 engages follower 102 and swings subframe 37 up and down about pivot 36. There are provided adjacent pivot 36 infeed rolls 72, the upper one of which may be swung away from the lower by means of ram mechanism 92. Outfeed pinch rolls 71 are mounted at the opposite side of subframe 37 from infeed pinch rolls 72. Through suitable connections 105 to the decks of veneer dryer 10 a variable speed control mechanism drives cam 101 so that outfeed rolls 71 will be in line with the correct veneer dryer deck.

Operation of the accused machine is as follows: Stacks of veneer may be placed on any conventional hoist or elevator in front and adjacent the infeed rolls of the machine. The operator adjusts the height of the elevator so that the top sheets of veneer in the stacks are in line with the nip of the infeed pinch rolls. The pinch rolls are automatically opened and the operator pushes the top sheets from each stack between the pinch rolls into engagement with fence 97. The infeed pinch rolls are automatically swung down into engagement with the veneer which is then propelled forwardly through subframe 37 into the nip of outfeed pinch rolls 71 which deliver the veneer to the correct deck of the dryer. The veneer sheets pass directly from infeed rolls 72 to outfeed rolls 71 and there is no conveyor mechanism for

³⁸ I.112, 113, 117; DX 123, II.587

³⁹ See drawings of the Jeddelloh patent reproduced at App. 20.

conveying or transporting the veneer from one set of rolls to the other. Plate 51 which extends between the two sets of rolls acts as a guide for any deformed pieces of veneer and also prevents debris from falling into the lower part of the machine.⁴⁰

Questions Presented

1. Whether Parker patent Re. 24,638 is invalid where it is drawn to an aggregation of old elements which perform no new or unexpected result; where the subject matter disclosed in the patent would have been obvious at the time of the alleged invention to one having ordinary skill in the art; where the patent overclaims the alleged invention by reciting in the claims an old combination of elements along with the alleged improvement; and where the reissue did not comply with the provisions of the reissue statutes.

2. Whether there is file wrapper estoppel of claim 17 of patent Re. 24,638.

3. Whether claim 17 can be construed to cover defendants' machine which does not have a vertically movable infeed end.

4. Whether the individual defendants who are officers of the corporate defendant should be held personally liable for infringement damages where they have acted only in their capacities as officers of the corporation, and where the Trial Court has expressly found that infringement was neither wilfull nor wanton.

⁴⁰ I.119

5. Whether the measure and computation of damages under all the circumstances of this case were correct.

SPECIFICATION OF ERRORS

1. The Trial Court erred in refusing to invalidate Parker patent Re. 24,638.

2. The Trial Court erred in finding that claims 3, 5 7 and 17 of the Parker reissue patent define a patentable invention.⁴¹

3. The Trial Court erred in failing to find that claims 3, 5, 7 and 17 of the Parker reissue patent are invalid because drawn to an unpatentable aggregation of elements.

4. The Trial Court erred in failing to find claims 3, 5, 7 and 17 of the Parker reissue patent invalid for overclaiming the alleged invention.

5. The Trial Court erred in refusing to apply the doctrine of file wrapper estoppel to prevent plaintiff from asserting claim 17 against the accused apparatus.

6. The Trial Court erred in finding that claim 17 of the Parker reissue patent is entitled to a range of equivalents such as to encompass the accused machine.⁴²

7. The Trial Court erred in concluding that the accused machine infringes claim 17 of Parker Re. 24,638.⁴³

8. The Trial Court erred in finding that the elevator

⁴¹ Findings of Fact XXX, XXXI, III.20

⁴² Finding of Fact XLVIII, III.24

⁴³ Conclusion of Law VII, III.25

employed in the accused apparatus for storing sheets of veneer is an integral and essential part of the accused feeding apparatus and is covered by claim 17 of the Parker reissue patent.⁴⁴

9. The Trial Court erred in rejecting defendants' exhibit 129 which shows that a separate elevator for storing veneer is not within claim 17 as contemplated by Parker.⁴⁵

10. The Trial Court erred in determining the amount of damages to be \$146,850.⁴⁶

11. The Trial Court erred in finding that the individual defendants are personally liable for infringement damages.⁴⁷

12. The Trial Court erred in awarding plaintiff an injunction against defendants, and each of them, for infringement of the Parker reissue patent.⁴⁸

13. The Trial Court erred in awarding costs and disbursements to plaintiff, and in failing to dismiss the complaint and award costs and disbursements to defendants.⁴⁹

⁴⁴ Finding of Fact XLIV, III.23

⁴⁵ The Trial Judge did not specifically state the grounds for rejecting this exhibit. At IV.32 of the record, one of plaintiff's counsel indicated the ground for objection to be that the document was prepared by an engineer in plaintiff's employ who had written it in connection with the description of a machine and how it operated. The substance of the document appears at App. 3-4 herein where it is reproduced in full.

⁴⁶ Supplemental Conclusion of Law B, III.47

⁴⁷ Supplemental Conclusion of Law B, III.47

⁴⁸ Conclusion of Law VIII, III.25; Supplemental Conclusion of Law C, III.47

⁴⁹ Supplemental Conclusion of Law D, III.47

SUMMARY OF ARGUMENT

Parker patent Re. 24,638 is not drawn to a patentable invention. It relates merely to an unpatentable aggregation of elements which are fully disclosed in the prior art, and which do not cooperate to produce a new or unexpected result.

The Parker reissue patent does not meet the standards of patentable invention because what it discloses would have been obvious at the time of the alleged invention to a person having ordinary skill in the art. It does not disclose a new invention within the meaning of 35 U.S.C. § 101.

Even assuming that Parker had made an improvement in sheet-feeding apparatus, namely, pinch rolls, claims 3, 5, 7 and 17 are invalid because they reclaim an old combination of feeder elements along with the pinch rolls.

Claim 17 of Parker is not infringed because it calls for "vertically movable feed means having an entering end and a discharge end, said feed means including a pair of pinch rolls . . . [, and] . . . power-actuated means for vertically moving said entering end of said feed means" The accused machine has vertically *fixed* infeed pinch rolls.

Plaintiff is estopped to assert claim 17 of the Parker patent against the accused apparatus, because, in order to secure allowance of this claim during prosecution before the Patent Office, Parker distinguished his verti-

cally movable pinch rolls from a prior art patent which showed feed means having a vertically fixed infeed end. In view of such estoppel, plaintiff is not entitled to a range of equivalents which would bring the accused apparatus within the coverage of claim 17.

Defendant's exhibit 129, which is an engineering document prepared by an engineer-employee of plaintiff, contains an important admission against interest and was improperly excluded from evidence by the Trial Court.

The Parker reissue patent is invalid in toto because it includes new matter which was not present in the original patent and is thus for a different invention from that shown in the original patent, because it includes broadened claims which were presented in an application for reissue filed more than two years after the grant of the original patent, and because it was supported by an invalid oath, signed only by the assignee of the patent, and presented in an application seeking a reissue on broadened claims. This conduct is in direct contravention of 35 U.S.C. § 251.

The individual defendants acted only in their capacities as officers of the corporate defendant, and the Trial Court expressly concluded that infringement was neither wilfull nor wanton. They should not be held personally liable for infringement damages.

The measure and computation of damages is incorrect because, even if there was infringement, it was very limited. Only one claim was found to be infringed and even that was questionable in the mind of the Trial

Judge. The royalty rate should be lower than that charged to prior licensees for use of the whole invention. Moreover, where damages are computed on the basis of a royalty, plaintiff is not entitled to have the royalty applied to apparatus sold by defendants which apparatus does not include the combination of elements found to infringe. Further, plaintiff is not entitled to have the royalty applied to defendants' maximum selling price where defendants have sold apparatus at differing selling prices.

ARGUMENT

The Parker Patent is Not for a Patentable Invention

The crucial findings by the District Court on this aspect of the case are findings XXX and XXXI.⁵⁰ These findings are clearly erroneous and should be rejected by this Court.⁵¹

A good starting point in determining the gist of an invention is the inventor's own appraisal because it car-

⁵⁰ III.20

"XXX. The patent claims here in issue cover new combinations of elements which cooperate to produce a new and beneficial result, and this invention was not obvious to one skilled in the art."

"XXXI. Although each element of the patent in suit is old in the art, in combination they achieved a new result which enabled only one operator to feed sheets of veneer from stacks to various decks of a dryer with greater ease and less breakage and with much less manpower and expense. It was something more than a mere advance in the efficiency or utility of a machine; it was a new method of feeding sheets of green and wet veneer into a dryer."

⁵¹ "The Supreme Court has held that the determination by the trial court of the question of invention need not be accorded the respect given ordinary findings of fact." *Oriental Foods v. Chun King Sales*, 9 Cir., 1957, 244 F.2d 909, 913.

ries definite weight.⁵² Mr. Parker was not alive at the time of trial but plaintiff's president, Mr. Milbourn was well acquainted with Mr. Parker's work at the time of the alleged invention and Mr. Milbourn's testimony reveals that what Mr. Parker considered his invention to be was the discovery that pinch rolls would feed veneer when only the entering edge of a sheet is inserted between the pinch rolls. Mr. Milbourn testified as follows:

"Q. What was that idea succinctly, as briefly as you can state it?

'A. That idea basically, the one thing that had to be proved to see if other aspects should be developed, was whether or not a pair of pinch rolls would take hold of this sheet and propel it in a forward direction or would take hold of a series of sheets and propel it when only the entering edge of the sheet was pushed into the roller.

'Q. As you recall it, Mr. Parker had this concept?

'A. I recall it vividly when he came into the office that morning and propounded the theory.

'Q. Sort of said, "Eureka! I have got it"?

'A. That's right, "I think I have got it."

'Q. "I think I have got it"?

'A. Yes.'

"Q. Do you recall that testimony?

"A. Yes, sir.

"Q. Is that testimony correct?

"A. Yes."⁵³

⁵² *Timken Detroit Axle Co. v. Cleveland Steel Products Corp.*, 6 Cir., 1945, 148 F.2d 267, 270; *Jungersen v. Baden*, 2 Cir., 1948, 166 F.2d 807, 809.

⁵³ I.143, 144

Mr. Milbourn also said:

"In other words, the most unknown factor was whether the pinch rolls would successfully propel veneer. Granted that pinch rolls in themselves were not new, but, to the best of our knowledge, no one had used pinch rolls to propel veneer by sticking only the entering edge of the veneer into the pinch rolls" ⁵⁴

Plaintiff's expert Mr. Miles, on direct examination testified as follows:

"Q. In your opinion, does the combination evidence anything more than what would be expected of a reasonably competent person familiar with the art?

"A. Yes. Specifically, as we have discussed before, the elements individually have all been present in the prior art.

"The key to the invention, as I see it, was the—although it is not the invention but it is the key to the combination—was the addition of the pinch roll assembly in combination with the other elements to wield the result." ⁵⁵

In filing for and obtaining the reissue patent, plaintiff confirmed Mr. Parker's belief that pinch rolls were the essence of his invention. In the oath which accompanied the application for the reissue patent, ⁵⁶ it was stated that the combination of elements called for in original claims 10, 11 and 14 were invalid in view of Streeter patent 1,809,456 because those claims did not

⁵⁴ I.145

⁵⁵ I.285

⁵⁶ PX 4, p. 57

call for pinch rolls. Plaintiff therefore conceded that everything called for in those claims was old and that the only way of distinguishing from Streeter was by the inclusion of the pinch roll mechanism in the claims. On behalf of plaintiff, Mr. Milbourn submitted an affidavit to the Patent Office in connection with the reissue application which contained the following:

"That until recently Petitioner considered claims 10, 11 and 14 of said patent No. 2,649,182 as valid and of distinguishing scope over the prior art and especially over the references cited by the Patent Office during the prosecution of the application upon which said patent issued; that recently an infringement suit [the present suit] was brought on said patent No. 2,649,182 and in the answer filed by the defendants therein a number of prior art patents were referred to as invalidating said patent including patents not cited during the prosecution of the application upon which said patent issued; that the attorneys for Petitioner studied said prior art patents and have advised petitioner that claims 10, 11 and 14 of said patent No. 2,649,182, as presently worded, are so broad in scope that they are probably invalid over the disclosure of United States Patent No. 1,809,456, one of said prior art patents, which was not cited by the Patent Office during the prosecution of the application upon which said patent issued; that said attorneys pointed out that said claims 10, 11 and 14 of said patent No. 2,649,182 were *probably invalid because they did not specify that the sheet feeding mechanism claimed includes pinch roll means* for advancing a veneer sheet and were therefore possibly subject to

a broader interpretation although pinch rolls are the means shown in the patent"⁵⁷

Claim 10 in the original Parker patent read as follows:

"In equipment for loading sheet material into a multiple power driven conveyor deck type machine, a sheet feeding mechanism including power driven elevating means shiftable vertically to direct sheet material into different ones of the multiple conveyor decks of the machine, and control means to intermittently initiate operation of said elevating means at intervals which are a function of the speed of the conveyor decks, which control means includes a control device operated in synchronism with the power driven conveyor decks."

Original claims 11 and 14 were very similar to claim 10. New claims 10, 11 and 14 all had the phrase "pinch roll means" added to them. It is also noteworthy that each of these new claims had the word "veneer" inserted between "sheet" and "material" in the introductory phrase, as well as the addition of the phrase "a stack of veneer sheets." No such limitations were made to claims 3, 5, 7 and 17, which simply call for "feeding (loading) material in sheet form into a multiple deck conveyor type machine."

The District Judge, in interpreting these claims, read them as being limited to a machine for feeding sheets of veneer into a veneer dryer and on that basis distinguished from the prior art references. He said:

⁵⁷ PX 4, p. 57

"At the hearing after remand, defendants stressed three prior patents: Streeter, 1,809,456, Cross 640,368, and Campebl 1,216,773.

"Streeter was one of the patents considered by the patent examiner in the Parker application for a reissue patent. Although both the others are patents on feeders, Cross related to paper and Campbell to tin plate. In fact none of the patents cited by defendants throughout these proceedings, with the exception of plaintiff's own Moore patent, relates to a veneer feeder, and an apparatus constructed substantially in accordance with the teachings of Moore was unworkable."⁵⁸

The grant to a patentee is measured by the claims⁵⁹ and it was error to construe claims to include the "veneer" limitation which had been expressly omitted from the claims in issue.

However, even the "pinch roll" limitation can not save the claims of the Parker patent because pinch rolls for feeding all sorts of materials, including veneer, were very old. Mr. Miles, plaintiff's expert, testified that the use of pinch rolls was usual in veneer dryers.⁶⁰ As shown at the right-hand side of Fig. 1 of the Parker patent, rollers 20-23 are pinch rolls.

Cross patent 640,368⁶¹ is for a sheet-feeding mechanism described with reference to sheets of paper but the claims are not limited to paper and refer simply to

⁵⁸ III.7

⁵⁹ *Stallman v. Casey Bearing Co.*, 9 Cir., 1957, 244 F.2d 905, 908.

⁶⁰ I.102, 103

⁶¹ DX 101, II.354

"a pile of sheets." The pile of sheets is supported on an elevator *B* which is vertically adjusted to align the topmost sheet on the pile with a pair of pinch rolls *E*, *E'*. Upper rolls *E'* are mounted on rocker arms *e'* so that they may be intermittently swung away from the lower rolls to permit insertion of a sheet and when rolls *E'* are swung down to engage the sheet placed in the nip of rolls *E*, *E'*, the sheet is pulled from the pile and delivered to feed table *C*.⁶² Elevator *B* is periodically vertically moved by the operator to maintain alignment between the top of the stack of sheets and pinch rolls *E*, *E'*.⁶³

Campbell patent 1,216,773⁶⁴ is a sheet-feeding device in which a stack of sheets (the invention is described in terms of sheets of tin plate but the claims are not so limited) is supported on a vertically movable table 26 which is automatically adjusted to maintain alignment between the top of the stack and a pair of pinch rolls 21, 22. Suction head 30 picks up and places the leading edge of the top sheet between the pinch rolls, the upper roll of which has been automatically moved away to permit insertion of a sheet. After a sheet has been placed between rolls 21, 22, upper roll 22 is swung down to engage the sheet and it is fed from the machine.⁶⁵

The District Court held that "The essential feature of both the Parker apparatus and the accused apparat-

⁶² DX 101, p. 1, col. 2, ll. 80-87; p. 4, col. 2, ll. 111-134

⁶³ DX 101, p. 1, col. 2, ll. 53-59

⁶⁴ DX 105, II.396

⁶⁵ DX 105, p. 1, col. 1, ll. 45-50; p. 2, cols. 1 & 2, ll. 60-74, ll. 89-94; p. 3, col. 2, ll. 70-78, ll. 104-109

us is the maintenance of a roll stack alignment at the infeed end.”⁶⁶

That feature was clearly disclosed by Cross and Campbell, neither of which was before the Patent Office Examiner during prosecution of the Parker applications.⁶⁷

Streeter patent 1,809,456⁶⁸ discloses sheet-feeding mechanism for a multiple-deck dryer which has everything called for in the asserted Parker claims except pinch roll mechanism. Streeter was principally concerned with feeding partially manufactured material, such as wallboard, which could not be stacked and was therefore moved in a more or less continuous flow from a pressing device to the multiple-deck dryer. Referring to the Streeter patent, and particularly Fig. 1 and the simplified drawing of the Streeter patent,⁶⁹ the unit marked A at the right-hand side of the drawing is the transfer mechanism which intermittently feeds sheet material to the conveyor mechanism B which is moved up and down to deliver sheets to the correct dryer deck under control from appropriate control mechanism connected to the drive for the dryer decks. Unit A has a plurality of driven rolls 4 supported on a frame 5 that is moved up and down by toggle links 6. Rolls 4 are operated as jump rolls to remove sheets of material from

⁶⁶ III.10

⁶⁷ Failure of the Patent Office to consider the most pertinent prior art dissipates any presumption of validity of a patent. *Pressteel Company v. Halo Lighting Products Inc.*, 9 Cir., 1963, 314 F.2d 695, 697.

⁶⁸ DX 110, II.446

⁶⁹ DX 140, II.605

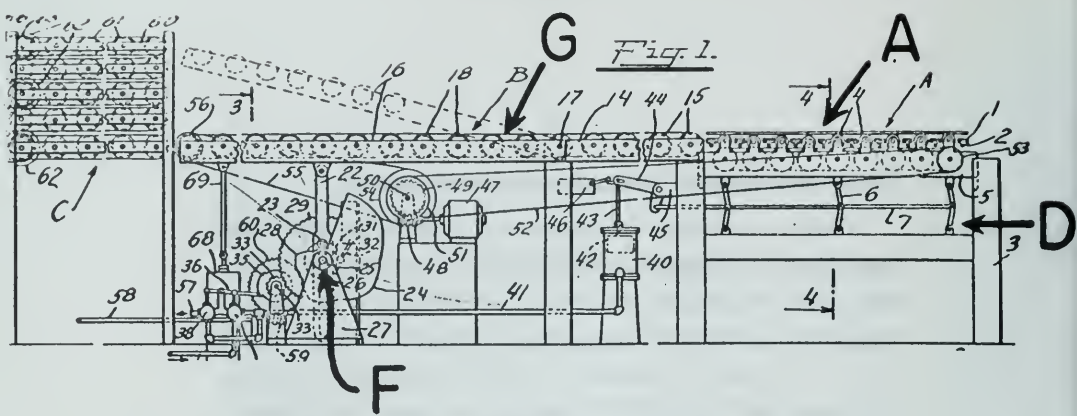
belts 1 and transfer the sheets onto conveyor *B*.

There is complete functional equivalence between the operation of Streeter and Parker. They both disclose machines for loading material in sheet form into a multiple-deck, power-driven conveyor comprising a feed end unit, a vertically movable conveyor-type table, and a discharge end unit which operates in timed relationship to the decks of the conveyor-type machine to deliver material thereto. The only structural element lacking in Streeter is pinch roll mechanism. As previously mentioned, Streeter has jump rolls 4 for feeding sheets. All that Parker did was to add a set of upper rolls such as shown by Cross or Campbell, at the infeed end.

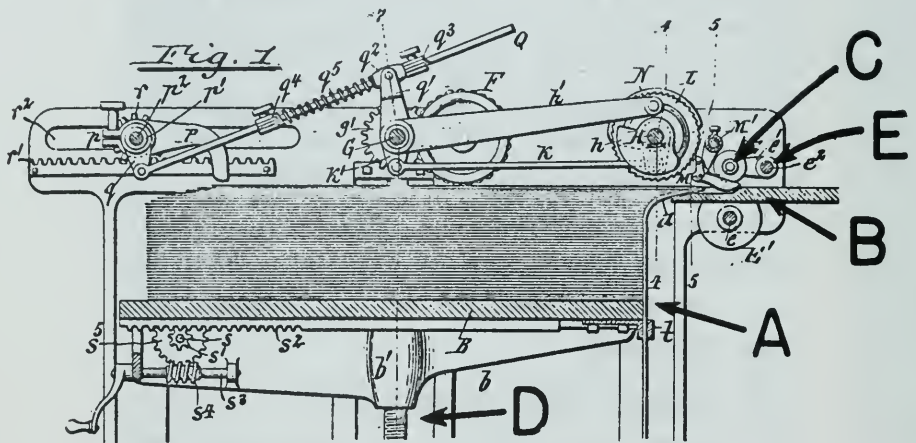
The basic elements called for in claims 3, 5, 7 and 17 of Parker are a sheet-feeding mechanism comprising:

- A. feed means having entering and discharge ends.
- B. pinch rolls.
- C. means for driving the pinch rolls.
- D. means for vertically moving the entering end.
- E. means for opening and closing the pinch rolls.
- F. control means for moving the discharge end in timed relation to the opening and closing of the pinch rolls.
- G. conveyor-type table.

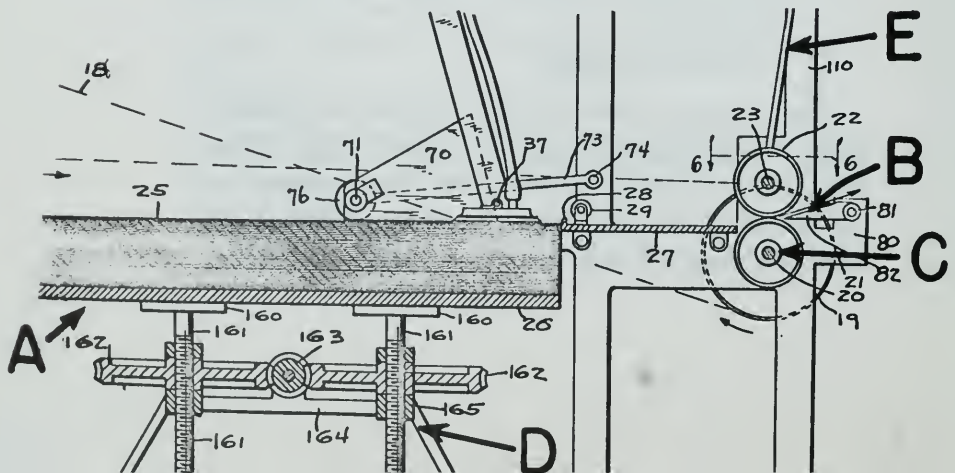
The manner in which these elements are found in Cross, Campbell and Streeter is shown on the following pages on which figures from those patents are reproduced along with claim 17 and the additional element of claims 3, 5 and 7.



CROSS



CAMPBELL (FIG. 3)



PARKER CLAIM 17

In equipment for loading material in sheet form into a multiple deck power driven conveyor type machine, the combination of

- A vertically movable feed means having an entering end and a discharge end, said feed means including
- B a pair of pinch rolls,
- C means for driving said pinch rolls,
- D power actuated means for vertically moving said entering end of said feed means,
- E power actuated means for producing relative movement of said pinch rolls toward and from each other, and
- F automatically controlled power actuated means for moving said discharge end of said feed means vertically in timed relation to the relative movement of said pinch rolls relative to each other.

ADDITIONAL BASIC ELEMENT IN PARKER CLAIMS 3, 5, 7

- G a conveyor type table.

Cross and Campbell patents. The District Court's manner of distinguishing from these patents on the basis that Parker's invention had to do with feeding veneer which had special problems and the prior art with feeding of other materials is, as previously discussed, immaterial if correct because the asserted claims are not limited to any particular type of sheet material. Furthermore, even if Parker's claims were limited, and he had been the first mechanically to feed veneer by pinch rolls, that would not amount to patentable invention. At best, all he taught was the use of a different material (veneer) with an old instrumentality (pinch rolls) which is not patentable.⁷⁴

Even if the Parker patented machine could be considered to be "new," the differences between it and the prior art are such that they would have been obvious to a person having ordinary skill in the art. Ever since the decision in 1850 of *Hotchkiss v. Greenwood*, 11 How. 248, the Supreme Court has held that an invention must not only be new and useful but it must also be the product of a greater degree of ingenuity or skill than that possessed by "an ordinary mechanic acquainted with the business."⁷⁵ That language of the *Hotchkiss* case was paraphrased and codified in 1952.⁷⁶ In *A. & P. Tea Co. v. Supermarket*, supra, the doctrine of the *Hotchkiss* case was given renewed vitality and applied most forcefully to mechanical patents claiming combinations of old elements.

⁷⁴ *Griffith Rubber Mills v. Hoffar*, supra.

⁷⁵ *Id.* at 266

⁷⁶ 35 U.S.C. § 103

As the Court said (pp. 152-153):

"A patent for a combination which only unites old elements with no change in their respective functions, such as is presented here, obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men. This patentee has added nothing to the total stock of knowledge"

In a long line of cases, commencing with *Photochart v. Photo Patrol*, 9 Cir., 1951, 189 F.2d 625; *Himes v. Chadwick*, 9 Cir., 1952, 199 F.2d 100, and *Berkeley Pump v. Jacuzzi Bros.*, 9 Cir., 1954, 214 F.2d 785, this Court has expressly followed the holding of the *A. & P.* case that claims for combinations of old mechanical elements must be carefully scrutinized, and there is no patentable invention unless it can be shown that the elements operate in a different manner to accomplish a different and unexpected result in the patented combination from what they previously did.

In *William T. Alvarado Sales Co. v. Rubaloff*, 9 Cir., 1959, 263 F.2d 926, 930, 931, this Court, in invalidating a patent claiming a combination of old mechanical elements, said:

"Its components do not perform any additional or different function in the combination than they perform out of it. To be sure, they perform this same function differently, and perhaps better. This difference, and betterment, evidences the practical application of a good idea. It is not, however, an idea which in practice has produced such unusual or surprising consequences or has so added

to the total stock of knowledge that it represents invention in the constitutional sense."

Welsh Co. of California v. Strolee of California, Inc., 9 Cir., 1963, 313 F.2d 922, 928, is a patent case which had been remanded to the district court because certain "findings are too broad and conclusory."⁷⁷ In finally holding that it did not amount to invention to use a particular inverted V-toggle bar in the combination of old elements, the Court quoted with approval from *Packwood v. Briggs & Stratton Corp.*, 3 Cir., 1952, 195 F.2d 971, 973:

" 'This conception has been particularly helpful in the evaluation of those discoveries in the field of mechanics which have involved only combinations of old and familiar elements and ideas. When, if ever, can such combination be said to add to scientific knowledge? The reasonable and accepted answer is if, but only if, the particular combination yields some surprising or extraordinary result ' "

Even if the machine claimed by Parker as an invention was the first machine that fed sheets of veneer into a dryer, that was not an unusual, surprising or different result from that expected.⁷⁸

In *Talon, Inc. v. Union Slide Fastener, Inc.*, 9 Cir., 1959, 266 F.2d 731, 735, the Court said that even though there was "a new cooperative relationship" between the old elements the result was only an improvement in

⁷⁷ 290 F.2d 509, 510.

⁷⁸ See also *Griffith Rubber Mills v. Hoffar*, supra, at 3.

control or efficiency and that where elements performed the same mechanical function as they had previously been known to perform, this did not amount to patentable invention but was something that any mechanic skilled in the art would expect the combination of elements to produce. To the same effect is this Court's recent opinion in *Continental Connector Corp. v. Houston Fearless Corp.*, 9 Cir., 1965, 350 F.2d 183, 190, 191.

Another case which has much in common with the present one is *Canadian Ingersoll-Rand Co. v. Peterson Products of San Mateo*, D.C. N.D. Cal., 1963, 223 F. Supp. 803. Judge Sweigert's scholarly opinion, particularly on the questions of invalidity because of aggregation of old elements and obviousness to one having ordinary skill, were expressly approved by this Court on appeal, 1965, 350 F.2d 18. Judge Sweigert said (pp. 821, 822):

"When nothing tangible is new and invention, if it exists at all, is only in bringing old elements together, the conjunction or concert of known elements must contribute something. Only when the whole in some way exceeds the sum of its parts and is not the usual result of uniting elements old in mechanics is the accumulation of old devices patentable. The parts must perform some different or additional function or their combination must produce unusual or surprising consequences for one schooled in that particular art."

(p. 823):

"If Anderson had devised something new in the cutter or in the spray gun or had accomplished

something surprising or unusual in the combination of the two—beyond the normal functioning of the parts in a mechanical combination—the situation would, of course, be different.

“Where, however, the claim of invention rests, not upon a new ingenious arrangement of old elements, but, as in the pending case, upon taking a prior art cutter, admittedly known and used in the art and complete in itself, to mechanically combine it with a dual spray gun also admittedly known and used in the art and complete in itself, to operate them conjointly, such accomplishment, of itself, should not in the opinion of this Court be held patentable invention . . .

* * * * *

“In the absence of some claim of singular novelty in the cutter, or in the spray gun, or in both, this result is attributable only to the mechanical mounting together or conjoint use of the two known elements.”

An examination of the Parker patent shows that all that he did was to combine a vertically movable conveyor for delivering sheet material to the decks of a dryer (Streeter) with pinch feed rolls in which roll stack alignment was maintained (Cross, Campbell). It is clear that Parker's assembly of these old elements was aggregation rather than true combination because they operate together just the way they operated separately and produce the expected result. Even Mr. Miles, plaintiff's expert, had to admit that that was so. Mr. Miles said:

“THE COURT: Does the conveyor belt in the

Parker Patent act the way any belt would act, or did it produce some new and surprising result?

"THE WITNESS: It only maintained—it did not necessarily produce any new and surprising result.

"THE COURT: You expected the conveyor belt to do exactly what this conveyor belt did?

"THE WITNESS: Yes, maintain the situation that has been established."⁷⁹

* * * * *

"Q. Do these pinch rolls operate any differently from any way pinch rolls had ever operated before?

"A. No.

* * * * *

"Q. Do the pinch rolls in the exit end, the outfeed pinch rolls in the unit E, operate any differently from any pinch rolls that existed before?

"A. As a separate unit, no.

"Q. They all operate the same?

"A. As individual units, yes."⁸⁰

With respect to the combined operation of the in-feed pinch rolls, conveyor belts and outfeed pinch rolls, Mr. Miles finally agreed that all these elements combined to produce the expected result.

"Q. I am asking do they operate and perform a function and produce a result that would be expected if you took those three elements and combined them together?

"A. Yes."⁸¹

That it could not amount to patentable invention for Parker to use pinch rolls in an automatic sheet feeder

⁷⁹ I.274

⁸⁰ I.290

⁸¹ I.292

for a multideck dryer is strongly indicated from *Altoona Publix Theatres v. American Tri-Ergon Corp.*, 1935, 294 U.S. 477. In *Tri-Ergon* the Supreme Court held invalid a patent based on the addition of a flywheel to mechanism for producing sound for talking motion pictures because (p. 486):

“The inclusion of a flywheel in any form of mechanism to secure uniformity of its motion has so long been standard procedure in the field of mechanics and machine design that the use of it in the manner claimed by the present patent involved no more than the skill of the calling.”

The Court went on to say (p. 486):

“Patents for devices for use both in the motion picture art and in the art of sound reproduction, notably the Holst, the Bell & Tainter, the Dragoumis patents, and the Edison application, already noted, plainly foreshadowed the use made of the flywheel in the present patent, if they did not anticipate it. The patentees brought together old elements, in a mechanism involving no new principle, to produce an old result, greater uniformity of motion. However skilfully this was done, and even though there was produced a machine of greater precision and a higher degree of motion-constancy, and hence one more useful in the art, it was still the product of skill, not of invention.”

The Parker Patent is Invalid for Overclaiming

Claims 3, 5, 7 and 17 of the Parker patent are also invalid for overclaiming. Ever since *Bassick Mfg. Co. v. Hollingshead*, 1936, 298 U.S. 415, and *Lincoln Engineering Co. v. Stewart-Warner*, 1938, 303 U.S. 545, it

has been the law that even if one improves an element of an old combination, he may not repatent the old combination by reclaiming it with the improved element but must patent only that portion which he improved.

It was previously shown that Streeter had everything claimed by Parker except pinch rolls and that if Parker made any improvement at all, it must have been the substitution or addition of pinch rolls in place of Streeter's single jump rolls at the infeed end of the machine. Parker's claims, however, are not limited to the pinch roll mechanism, but seek to repatent the old feeder and control mechanism along with the pinch rolls.

In a case involving a device somewhat similar to that of the Parker patent, *Heyl & Patterson, Inc. v. McDowell Co.*, 4 Cir., 1963, 317 F.2d 719, the court said, p. 723:

"The mere improvement of one portion of an apparatus does not permit a patenting of the whole (Citing cases). Plaintiff, having at the very most hit upon a mechanical change to facilitate the use of the upper end of the chute leading to the ship's hold in place of a stationary pan, patented the entire apparatus from the hopper to the gate. This is much more than any possible invention to be found in plaintiff's apparatus.

"We therefore, hold that the plaintiff's patent is invalid in that it is lacking in invention and because it claims too much."

In *Pierce v. Ben-Ko-Matic, Inc.*, 9 Cir., 1962, 310 F.2d

475, 477 the Court quoted with approval the following from *Perfect Circle Corp. v. Hastings Manufacturing Co.*, D.C. W.D. Mich., 1958, 162 F. Supp. 777, 784:

“‘The improvement of one element or part in a combination of old elements or parts does not entitle a patentee to a monopoly on the entire combination.’”

Claim 17 is Not Infringed

The District Court found that there was no infringement of claims 3, 5 and 7 because the accused machine does not have a conveyor-type table or its equivalent.⁸² In this finding, the Court was clearly correct. Claim 17, however, was held infringed under the doctrine of equivalents.⁸³

Claims must be construed in the light of the specifications, drawings and file history of the patent⁸⁴ and an “inventor is entitled to a range of equivalents commensurate with the scope of his invention.”⁸⁵ Even if Parker made a patentable invention, it must be narrowly construed in the light of the prior art. The District Court correctly held in its first opinion and findings that Parker was entitled only to a narrow range of equivalents.⁸⁶ That holding was never expressly contradicted in the District Court’s second opinion or findings.

Claim 17 is not infringed because it calls for “ver-

⁸² Findings XXXIX, XL, III.22-23

⁸³ Findings XLVII, XLVIII, III.24.

⁸⁴ *Whiteman v. Mathews*, 9 Cir., 1954, 216 F.2d 712, 715.

⁸⁵ *Nelson v. Batson*, 9 Cir., 1963, 322 F.2d 132.

⁸⁶ I.39, 43.

tically movable feed means having an entering end and a discharge end, said feed means including a pair of pinch rolls . . . [and] . . . power-actuated means for vertically moving said entering end of said feed means . . .” In the accused machine the feed means are vertically fixed infeed pinch rolls. Plaintiff does not deny that defendants’ infeed pinch rolls are fixed, but interprets “vertically movable feed means” to include a separate hoist or elevator vertically movable relative to the infeed pinch rolls which may be positioned in front of the accused feeder for storage of stacks of veneer prior to loading sheets into the pinch rolls. The elevator is a standard piece of unpatented equipment which is commonly used in plywood manufacturing plants and is available from various sources. Defendants sell the elevator separate from the feeder and sell one without the other, although the elevator is presently the most efficient mechanism for maintaining roll stack alignment.⁸⁷ Finding XLIV that these elevators “are integral and essential parts of the accused feeding apparatus” is clearly erroneous.

Plaintiff is not entitled to interpret claim 17 to include a separate elevator mechanism which may be used in conjunction with the veneer feeder because that is not the teaching of the Parker patent. There is nothing in the drawings or the specification to suggest that Parker intended to include within the scope of either embodiment of his alleged invention, a veneer storage hoist or elevator that is vertically movable relative the infeed

⁸⁷ I.118, 127, 128

pinch rolls. That concept was an afterthought of plaintiff's patent solicitors after they saw the accused machine. This is clear from new claims 18-24 of the reissue patent which broadly cover any "means producing relative movement between" the stack of veneer sheets and the feed end (pinch rolls).

In the embodiment of his invention shown in Figs. 1-8 Parker shows a stack of veneer *B* resting on blocks in front of "feed end unit C." In describing the invention, Parker states (Col. 2, beginning line 19) the following:

"The present invention does not contemplate any change in the conventional manner of bringing the veneer to the dryer and, as shown, the veneer *B* is brought to the infeed end of the dryer *A*, or, more specifically, to the infeed end of the feeding mechanism stacked upon a truck 32 of conventional construction. The operator either standing upon the floor or upon a raised platform 33 pushes the top piece of veneer on the stack between the rubber covered pinch rolls 34, 35 of the feed end unit C of the feeding mechanism until it strikes a stop 36. The pinch rolls 34, 35 are movable vertically, as will be hereinafter described, so that the pinch rolls can be maintained in substantial alignment with the top of the stack of veneer upon the truck, thereby facilitating the feeding of the top piece of veneer between the pinch rolls. . . .

"The feeding mechanism comprises the feed end unit C, a floating conveyor or *guide* table *D*, and a discharge end unit *E*. The feed end unit C comprise a frame and a vertically movable assembly." (Italics in original)

It is clear from the foregoing that mechanism for supporting a stack of veneer *B* forms no part of Parker's invention. The feeding mechanism is limited to unit *C* and the entering end of the feed means is the vertically movable pinch rolls 34, 35.

Let us now look at the alternative construction shown in Fig. 9. In that construction a large vertically movable elevator 350 supports both stack of veneer *B*, and infeed pinch rolls 34, 35. Movement of elevator 350 produces no change in the position of the stack relative to the infeed pinch rolls. Like the other embodiment of the patent, the pinch rolls are moved vertically with respect to the support for the veneer (the top of elevator 350) through a separate elevator 100. Elevator 350 moves up and down to align pinch rolls 34, 35 with the correct dryer deck and elevator 100 moves the pinch rolls up and down to maintain alignment between the pinch rolls and the stack of veneer *B* just the same as is done in the embodiment shown in Figs. 1-8. Parker explains this (Col. 9, beginning line 20) as follows:

"In the alternative construction shown in Fig. 9, the floating table *D* and the discharge end unit *E* are omitted and the feed end unit *C* and the portion of track which supports the truck or trucks 32 in position for feeding the veneer to the feed end unit *C* are both mounted on a vertically movable platform or elevator 350. The elevator shown is of the hydraulic type operated by an electric motor driven pump and is moved vertically to align the pinch rolls 34, 35 of the feed end unit *C* with the particular deck 10, 11, 12, or 13 which it is desired to feed either manually or automatically in

a manner similar to that in which the vertically movable assembly of the discharge end unit is aligned with the various decks previously described."

Actually we do not believe that claim 17 can properly be read on the embodiment shown in Fig. 9 of the Parker patent because the claim calls for a "vertically movable feed means having an entering end and a discharge end" In the embodiment shown in Fig. 9 there is no discharge end in the sense meant by Parker because "the discharge end unit E" has been omitted.⁸⁸

In defendants' machine the infeed pinch rolls feed the sheets directly to the outfeed pinch rolls, whereupon the outfeed pinch rolls continue the feeding operation and feed the veneer into the dryer. The elevatable platform which may be positioned in front of the accused machine provides a support for veneer sheets, but in no sense *feeds* them into a dryer or other conveyor-type machine. It is necessary for an operator manually to pick up and remove sheets from the stack and insert their forward ends between the infeed pinch rolls before commencement of feeding of such sheets by the machine into the dryer.

Claim 17 calls for a feed means for a conveyor-type machine (dryer) and specifies "means for vertically moving said entering end of said feed means" This can not fairly be said to read upon apparatus such as defendants' wherein the machine does not actually commence feeding to the dryer until the veneer sheets are

⁸⁸ Col. 9, l. 21.

placed in the nip of the vertically stationary infeed pinch rolls.

Plaintiff is Estopped to Assert Claim 17

Reference may be had to the file wrapper history of the Parker patent as an aid in determining the true meaning of claim 17.⁸⁹ During the prosecution of the original Parker patent, original claims 19 and 20 (present claims 15 and 16) were rejected as unpatentable over Smith patent 1,141,277.⁹⁰ The Examiner, recognizing that the feed end of Smith's apparatus was stationary, said:

"Claims 19 and 20 are rejected as unpatentable over Smith. Smith discloses a vertically adjustable sheet discharging mechanism connected to a telescopic conveyor. While the feed end of Smith's conveyor is fixed adjacent the rolls 1 and 2 it would be obvious to the skilled mechanic to mount the feed end on a vertically adjustable head similar to the discharge end to receive sheets from a plurality of elevations."⁹¹

In response to the foregoing, Parker amended claims 19 and 20, and for the first time introduced present claim 17 (claim 21 in the file history), and in arguing patentability, made the following representation to the Patent Office:

"Claims 19 and 20 have been amended to more clearly distinguish over Smith upon which they were rejected and favorable reconsideration of the

⁸⁹ *Whiteman v. Mathews*, supra.

⁹⁰ DX 103, II.375.

⁹¹ PX 3, pp. 66, 67

rejection of these claims is requested. As now presented, *the claims specifically call for power actuated means for moving the sheet feeding unit vertically, in combination with automatically controlled power actuated means to raise and lower the sheet discharge unit.* The patent to Smith clearly does not show any such mechanism. *In Smith the entrance end of the conveyor table is stationary.*

"Favorable consideration of new claim 21 [now claim 17] presented herewith is requested. *This claim is drawn along the lines of claims already in the application* and is generic to both of the preferred embodiments shown. None of the references of record shows a sheet feeding mechanism for a multiple deck, power driven, conveyor-type machine comprising power driven pinch rolls, means for producing relative movement between the pinch rolls toward and from each other, *power actuated means for vertically moving the entering end of the feed means*, and automatically controlled, power actuated means for moving the discharge end of the feed means vertically in timed relation to the relative movement of the pinch rolls. Referring to the references relied upon in the last Office Action, attention is called to the fact that neither Jones, Smith nor Brunner shows any feeding means employing pinch rolls, much less automatically controlled vertical movement of the discharge end of a feeding means operated in timed relation to the relative movement of pinch rolls toward and from each other."⁹²

Thus it is clear that Parker considered vertically movable infeed pinch rolls, rather than fixed ones, to be

⁹² PX 3, p. 70

essential to his invention and the District Court erred in holding that defendants "employed an arrangement which was merely a reversal of parts. The essential feature of both the Parker apparatus and the accused apparatus is the maintenance of a roll stack alignment at the infeed end."⁹³ Plaintiff can not disavow its representation to the Patent Office, particularly since the manner in which the accused apparatus maintains roll stack alignment is precisely the same way as shown in the prior art Cross and Campbell patents. Furthermore, maintenance of roll stack alignment is obviously not essential to operation of either machine but simply makes feeding the machines easier for an operator because he doesn't have to bend over or reach up as far to insert veneer into the machines.

The District Court rejected the defense of file wrapper estoppel of claim 17 on the ground that the claim "was allowed in the form in which it was presented without rejection or amendment. . . ."⁹⁴ That was error because a claim does not have to have been rejected or amended in order to be subject to file wrapper estoppel.

When, during prosecution of an application, the applicant distinguishes a claim from prior art in order to avoid rejection, and the Patent Office allows the claim on the basis of the distinction made, whether the applicant changes the language of his claim or not, he is estopped from later asserting that his claim is broad enough to cover matter from which it was earlier distin-

⁹³ III.10

⁹⁴ III.10

guished.⁹⁵

And where the applicant, in the proceedings before the Patent Office, asserts that a particular claim is based on the subject matter of certain other claims, or contains the limitations of such other claims, he is estopped from later taking the position that the particular claim is broader than those other claims.⁹⁶

It was error for the District Court to reject the file wrapper estoppel defense because Parker clearly in his argument to support claim 17 disclaimed a machine which had fixed infeed rolls and he may not now disregard that limitation.

Plaintiff seeks to justify its reading of claim 17 to cover apparatus in which the infeed pinch rolls are vertically stationary by resorting to the following language in the specification:

"It is also to be understood that the vertically movable assembly of the feed end unit C may be

⁹⁵ *Ski-Mate Corp. v. Western Auto Supply Co.*, D. C. Texas, 1965, — F.2d —, 146 U.S.P.Q. 163; *Great Lakes Carbon Corp. v. Continental Oil Co.*, D.C. La., 1963, 219 F. Supp. 468, aff'd. 5 Cir., 1965, 345 F.2d 175; *Kinnear-Weed Corp. v. Humble Oil & Refining Co.*, D.C. Texas, 1956, 150 F. Supp. 143, aff'd. 5 Cir., 1958, 259 F.2d 398, cert. den., 1959, 4 L. Ed. 158.

⁹⁶ *Kinnear-Weed Corp. v. Humble Oil & Refining Co.*, supra; *Bacon American Corp. v. Super Mold Corp. of Cal.*, D.C., N.D., Cal., 1964, 229 F. Supp. 998 at 1007:

"Having represented to the examiner that in spite of the fact that the two new claims carried the reference to 'means' and made no reference to a swingable lower platen, these new claims, nevertheless, carried the same limitations as the old claims that taught only the swingable lower platen, plaintiff can not now, after issuance of the patent, withdraw Barefoot's self imposed limitation. In effect, Barefoot made an agreement with the Patent Office, and his assignee may not now destroy the effect of that agreement. *Thomas, et al v. Simmons Co.*, 126 F.2d 743 (CA 7, 1942); *Dempster Bros., Inc. v. Borg-Warner Corp.*, 170 F. Supp. 488 (D.C.)."

positioned at some convenient height above the floor and the veneer fed thereto in any suitable manner, either manually or automatically. Regardless of how the sheets of veneer are brought to and inserted between the pinch rolls 34, 35 of the feed end unit, the feed mechanism of the present invention will automatically feed veneer to a multiple deck dryer in predetermined sequence and in properly spaced relation with respect to the other veneer on the various decks."⁹⁷

Plaintiff asks too much of its claim. It seeks to twist the language of the claim first in one direction, to secure allowance by the Patent Office, and then in another direction to assert infringement. In *White v. Dunbar*, 1886, 119 U.S. 47, 51, the Supreme Court said:

"Some persons seem to suppose that a claim in a patent is like a nose of wax which may be turned and twisted in any direction, by merely referring to the specification, so as to make it include something more than, or different from, what its words express. The context may undoubtedly be resorted to, and often is resorted to, for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it and making it different from what it is. The claim is a statutory requirement, prescribed for the very purpose of making the patentee define precisely what his invention is; and it is unjust to the public, as well as an evasion of the law, to construe it in a manner different from the plain import of its terms."

In order to secure allowance of claim 17, Parker fo-

⁹⁷ Col. 9, l. 9

cused on and stressed vertically movable infeed pinch rolls. Plaintiff should not now, for the purpose of asserting infringement, be permitted to distort the claim language to cover vertically fixed infeed rolls which were previously expressly disavowed by plaintiff.

Thus, the above quoted portion of the Parker specification does not provide a basis for reading claim 17 to cover stationary infeed pinch rolls. However, the foregoing statement does provide a basis for excluding from the coverage of claim 17 any separate elevator mechanism. The language indicates, significantly, that the feeder proper as contemplated by the invention starts with the infeed pinch rolls and that the Parker invention has nothing to do with how the veneer gets to the pinch rolls, because "Regardless of how the sheets of veneer are brought to and inserted between pinch rolls 34, 35 of the feed end unit, the feed mechanism of the present invention will automatically feed veneer" In any event, to the extent, if any, that the statement is construed to cover as part of the invention a separate elevator for the stack of veneer in front of vertically fixed infeed rolls, it is contradicted by the file history.

There were substantial changes made in the way the Parker invention was claimed during the pendency of the Parker patent applications, indicating quite a different view of what the invention was between the time when the first application was filed and when the plaintiff obtained the reissue patent. Furthermore, plaintiff is met with the proposition that specifications

of a patent may be used to limit the claims but not to expand them.⁹⁸

The Parker patent does not disclose any mechanism for maintaining alignment between the infeed pinch rolls and the stack of veneer other than mounting the pinch rolls in a vertically movable supporting mechanism.

The use of an elevator mechanism or scissor lift in connection with stacks of veneer to maintain working height between the top of the stack of veneer and whatever machine is being fed is, of course, very old. In fact, plaintiff admitted that the use of an elevator like elevator 350 shown in Fig. 9 of Parker on which stacks of veneer were supported in front of veneer dryer decks was old.⁹⁹ The only difference between what existed and Parker Fig. 9 was the interposition of feed end unit C with its vertically movable pinch rolls between a stack of veneer and the dryer decks.

Even if claim 17 could as a matter of language be read on the accused machine, there is no infringement because, as previously discussed, the principle of operation and means employed in the accused machine are different from the patent. The District Court, erroneously concluded that claim 17 was infringed because both machines perform the same function to achieve the same result. The District Judge said in his opinion

⁹⁸ *Oregon Saw Chain Corp. v. McCulloch Motors Corp.*, 9 Cir., 1963, 323 F.2d 758. See also *Hutchinson v. Pacific Car & Foundry Company*, supra, at 759; *Del Francia v. Stanthony Corp.*, 9 Cir., 1960, 278 F.2d 745, 747.

⁹⁹ I.257-259

that roll stack alignment was the "essential feature of both the Parker and the accused apparatus" and since both machines attained that result there was infringement. The District Court not only disregarded the difference in the means employed by defendants for achieving roll stack alignment but failed to appreciate the difference in operation of the accused machine in which infeed and outfeed rolls are mounted relatively close to each other on a unitary frame that is pivoted. The nips of the infeed and outfeed rolls are always in alignment and sheets are passed directly from infeed to outfeed rolls.¹⁰⁰

The controlling law in this circuit was recently set forth in *Lockwood v. Langendorf United Bakeries, Inc.*, 9 Cir., 1963, 324 F.2d 82, 88 where the Court quoted with approval from Judge Sweigert's careful opinion:

"'Even if a claim can be read in terms upon an accused article, infringement does not necessarily follow unless it can be found as an ultimate fact that the article uses the inventor's idea as embodied in the inventor's design and drawings and that there is sameness or equivalence of function and means. See: *Trenton Industries v. (A. E.) Peterson Mfg. Co.*, 165 F. Supp. 523, 529 (S.D. Calif. 1958); *Grant v. Koppl*, 99 F.2d 106 (9th Cir. 1938); *McRoskey v. Braun Mattress Co.*, 107 F.2d 143, 147 (9th Cir. 1939).

"'The mere fact that the accused article performs the same function and achieves the same result as the patented article does not necessarily establish infringement unless it can be found that

¹⁰⁰ I.117-123, 178, 179; DX 139, II.604

this is accomplished in substantially the same way and where, as in this case, the art is fairly crowded and the main elements of the patent are found or indicated in prior art, this issue should be determined narrowly rather than liberally. If in fact, not merely colorably, the accused article departs from the teaching of the patent in the means by which it achieves the result there is no infringement. (citing cases)' ”.

The Differences Between the Patent and the Accused Apparatus is Emphasized by the Rejected Exhibit

As a result of pretrial requests by defendants, plaintiff produced certain documentary material, including photographs and a description of its Model 58 feeder which plaintiff started manufacturing after observing the commercial acceptance of the accused apparatus. The differences between Model 58 and the patent are clear from the prior discussion on infringement and a comparison of defendants' exhibits 130, 131 with a photograph of the patented machine, defendants' exhibit 132. The striking similarity between Model 58 and the accused machine is brought out by defendants' photographs of the accused machine, defendants' exhibits 133, 134.

Following Mr. Milbourn's testimony concerning plaintiff's Model 58 feeder.¹⁰¹ defendants sought to introduce into evidence DX 129 which is a description prepared by an engineer-employee of plaintiff concerning the construction and operation of its Model 58 feed-

¹⁰¹ I.147, 148

er. In paragraph number 2 of DX 129 the following appears:

*"Stacks of green veneer are placed in position in front of the feeder on elevators or other hoisting equipment, not a part of the feeder so that the top of the veneer stack can be maintained at a constant and convenient working height opposite the throat of the receiving rolls of the feeder."*¹⁰²

The elevator stated to be "not a part of the feeder" is precisely the same device which plaintiff insists, as far as the accused apparatus is concerned, is a part of the feeder.

The District Court excluded the exhibit at the trial.¹⁰³ At the time of the argument upon remand of the case, the matter was again brought up and the District Judge again rejected DX 129.¹⁰⁴ It was improper to exclude that exhibit because it contains a statement by plaintiff at an earlier date directly in conflict with the position taken by plaintiff at the trial. In *Canadian Ingersoll Rand Co. v. Peterson Products*, this Court said (350 F.2d 18, 25):

"Moreover, there is substantial authority for the proposition that it is appropriate to consider the actions and statements against interest of the inventor or patent owner in construing the scope of a patent (citing cases)."

If plaintiff in an engineering description expressly

¹⁰² For convenience of the Court, DX 129 is reproduced at the back of this brief at App. 3-4.

¹⁰³ I.150.

¹⁰⁴ IV.31, 32

excluded the elevator as part of a feeder copied after defendants' it was error for the District Court to include that elevator in reading a claim of plaintiff's patent on defendants' feeder.

The Parker Patent was Invalidly Reissued

Reissue patents are controlled by 35 U.S.C. § 251 and 35 U.S.C. § 252.¹⁰⁵

The right to a reissue of a patent is exceptional and is given only to those who come clearly within the exception.¹⁰⁶ It is therefore fitting and proper that the Parker reissue patent be closely scrutinized to see if there has been full compliance with 35 U.S.C. § 251. It is defendants' position that there has been substantial non-compliance with the statute.

Under the statute, in order for the Parker reissue to be valid, it must be directed to the same invention as that disclosed in the original patent.¹⁰⁷

In *Kalich v. Paterson Pacific Parchment Co.*, 9 Cir., 1943, 137 F.2d 649, this Court said (p. 652):

"In regard to the reissue patent, irrespective of the matter of invention, the question is whether in the light of the disclosures contained in both patents, the reissue covers the same invention. It must

¹⁰⁵ See App. 21-22.

¹⁰⁶ *Lockwood v. Langendorf United Bakeries, Inc.*, supra, at 94; see also *Ashland Fire Brick Co. v. General Refractories Co.*, 6 Cir., 1928, 27 F.2d 744, 746; *Gerhardt v. Kinnaird*, D.C. E.D. Ky., 1958, 162 F. Supp. 858, 864.

¹⁰⁷ *U. S. Industrial Chemicals, Inc. v. Carbide and Carbon Chemicals Corporation*, 1942, 315 U.S. 668, 86 L. Ed. 1105.

be apparent from the face of the instrument that what was embraced in the reissue was intended to have been taught and secured by the original. The invention must have been shown in the original patent. A reissue patent that broadens the claims to cover a new and different combination is void even though the result attained is the same as that brought about by following the process claimed in the original patent."

Also, in *Riley v. Broadway-Hale Stores*, 9 Cir., 1954, 217 F.2d 530, 532, the Court said:

"It must appear upon the face of the original patent that the matter covered by the reissue was intended to have been covered and secured by the original. *Leishman v. Associated Wholesale Electric Co.*, 9 Cir., 137 F.2d 722, 723; *Kalich v. Paterson Pacific Parchment Co.*, 9 Cir., 137 F.2d 649, 652. The broader claims of the reissue must be more than merely suggested or indicated in the original patent. *U.S. Industrial Chemicals, Inc. v. Carbide & Carbon Chemicals Corp.*, 315 U.S. 668, 675-676, 62 S. Ct. 839, 844, 86 L. Ed. 1105. As observed in that case, 'it is not enough that an invention might have been claimed in the original patent because it was suggested or indicated in the specification.'"

This very basic and explicit requirement, however, has been ignored in the Parker reissue patent. Claims 18 through 24 which are new in the reissue, are all directed to an invention different from that embraced in the original patent. These new claims call broadly for a machine having "means for producing relative movement between" a stack of veneer and pinch rolls. Thus,

they seek to include *any means* for producing such relative movement. This is a plain expansion of the invention as originally taught by the Parker patent. In that patent, the only means disclosed for producing such relative movement was elevator motor 100 which lowered or raised the pinch rolls depending upon the veneer stack's height. The original claims made reference only to a vertically movable assembly including pinch rolls, and means for moving the assembly. No mention or suggestion was made of other means for producing such a result. The original patent did not indicate that Parker's original intent was to cover *any means* for producing the relative movement called for in the reissue. That change was made as an afterthought—after suit had been filed and after plaintiff had studied defendants' machine.¹⁰⁸

The new claims were tailored to read, and do read, squarely on the accused machine. The concept of "any means" for producing the relative movement mentioned is new in the reissue patent. Thus, claims 18-24 which introduce this concept describe an invention which is different from the invention disclosed in the original patent, and which was not indicated in the original patent.

The Parker reissue is invalid also for the reason that new matter was introduced into the reissue application, and the scope of the claims of the original patent was enlarged in an application for reissue filed more than

¹⁰⁸ See *Ashland Fire Brick Co. v. General Refractories Co.*, supra, at 741, on the significance of reissuing a patent after seeing defendant's machine.

two years subsequent to the grant of the original patent. Both of these matters are expressly forbidden by 35 U.S.C. § 251.

Plaintiff changed the specification of the reissue patent by adding the words "*or guide*" after the word "conveyor" in the specification.¹⁰⁹ Plaintiff thereby introduced new matter in the application, because the concept of the conveyor table of Parker acting as a guide was completely absent from the original disclosure. Nowhere in the original patent was the conveyor table D shown, described or claimed as a "guide." It was always shown and described as a floating conveyor table comprising power-driven belts which transported veneer from the infeed to outfeed ends of the machine. The reason for this is, obviously, that Parker was concerned with transporting veneer sheets in the region between the infeed and outfeed pinch rolls independently of the pinch rolls, and to do this, it was necessary to employ power driven apparatus operating between the sets of rolls. "Guiding" alone would not have been enough. The equating in the reissue of "conveyor" and "guide" is unsupported by the original disclosure. The addition was made in the reissue patent for the specific purpose of covering the accused machine. While the accused machine has no conveyor table, it does have a plate or table (element 51 in the Jeddelloh patent) which might be considered a "guide" for veneer as it passes from the infeed rolls to the outfeed rolls.

Furthermore, the addition of the words "*or guide*" to

¹⁰⁹ Col. 2, l. 40

the specification resulted in a broadening of the scope of the claims, such as claims 3, 5 and 7, because "guide" is broader than "conveyor" and claims must be read in light of the specification¹¹⁰ (in this case in light of the altered specification of the reissue).¹¹¹

Thus, the claims in the reissue patent which call for a "conveyor type table" must now be read to include "guide," because the teaching of the reissue specification is that they are equivalents, and those claims have been broadened. Such broadening is not permitted under the statute even where new matter is not introduced into the reissue, where, as here, the reissue is applied for more than two years after the grant of the original patent.

The reissue patent to Parker is invalid for the further reason that plaintiff also failed to comply with the statutory reissue requirements that an assignee may make application for a reissue only "if the application does not seek to enlarge the scope of the claims of the original patent."

To the extent that claims may be enlarged within the two year limit provided in the statute, only the inventor may apply for such enlargement since only he would know the proper extent of his invention, and thus, would be the only one capable of making a valid oath to support the application. Here, however, plaintiff, Coe Manufacturing Company, the assignee of the original patent,

¹¹⁰ *Del Francia v. Stanthony Corporation*, supra, at 747.

¹¹¹ The grant of a reissue patent extinguishes the original patent. *Kinnear-Weed Corp. v. Humble Oil & Refining Co.*, supra, at 160.

made the application for the reissue patent through its president, Mr. Milbourn.¹¹² If we are correct that the scope of at least some of the claims of the original patent was enlarged by the addition of new broader claims 18-24, and by broadening of the meaning of "conveyor type table," then all claims of the reissue, including those carried over unchanged from the original patent, are invalid by reason of a defective oath.

It must be remembered that the right to a reissue patent is "exceptional," and depends upon close adherence to the statutory provisions of 35 U.S.C., § 251. Among those provisions the one expressly prohibiting an assignee under any circumstances from applying for a reissue patent where there is an enlargement of the original claims was not complied with in the present case. Thus, the Parker reissue application was supported by a defective oath, and the resulting reissue patent was illegally granted. As far as we have been able to determine, this is a case of first impression with respect to such an application by an assignee. However, a case which suggests the result which the statute seems to demand is *Staudé v. Bendix Products Corporation*, D.C. N.D. Ind., 1939, 26 F. Supp. 901, 903, aff'd 7 Cir., 1940, 110 F.2d 484, where the court said:

"The courts seem to have differed somewhat on the question and, after giving considerable attention to the authorities, I am forced to the conclusion that the true rule is that in a reissue patent properly and legally granted, claims brought forward from the original patent are enforced although some

¹¹² PX 3, p. ½.

of the claims of the reissue may be cut down, but that where the reissue is improvidently and illegally granted or where it is tainted with fraud, it is void ab initio, and a claim even though brought forward from the original patent goes out with the reissue. *General Electric Co. v. Richmond Street & I. Railway Co.*, 7 Cir., 178 F. 84; *Christensen v. Bragg-Kleisrath*, 19 F. Supp. 496."

Finally, according to 35 U.S.C. § 251, a reissue patent is available only to correct "error" in the original patent which results in that patent being wholly or partly inoperative. The "error" referred to in the statute which is correctible by reissue means the same as the phrase "inadvertence, accident or mistake" which appeared in the old reissue statute.¹¹³ After seeing defendants' machine, plaintiff reissued the Parker patent with new claims 18 to 24 which clearly were written to cover defendants' machine. Defendants submit that the Parker reissue was sought not to correct an error in the original patent, but rather to add to it coverage of items entirely lacking, namely, a guide table, and *any* means for producing relative movement between a stack of veneer and the infeed pinch rolls. As the court said in *Gerhardt v. Kinnaird*, *supra*, at 865:

"In the light of the whole record it is not an unreasonable deduction that the application was not so much to correct an 'error' in the original application but to inject an item which was wholly absent in the original patent; an item which set forth an invention otherwise entirely lacking."

¹¹³ *Moist Cold Refrigerator Co. v. Lou Johnson Co.*, 9 Cir., 1954, 217 F.2d 39.

Such a reissue patent is not in accord with the statute and is entirely void ab initio.

The Individual Defendants are Not Personally Liable for Infringement Damages

Defendants moved to amend the judgment to eliminate findings of individual liability of Fred and Otto Jeddeloh.¹¹⁴ The Court denied defendants' motion¹¹⁵ and entered judgment against the individual defendants, as well as against the defendant corporation.¹¹⁶

The general rule is that an officer of a corporation who acts as an officer and does not willfully and outside of his capacity as an officer infringe a patent is not personally liable. The rule was stated in *Dangler v. Imperial Mach. Co.*, 7 Cir., 1926, 11 F.2d 945, 947, as follows:

"It is when the officer acts willfully and knowingly—that is, when he personally participates in the manufacture or sale of the infringing article (acts other than as an officer), or when he uses the corporation as an instrument to carry out his own willful and deliberate infringements, or when he knowingly uses an irresponsible corporation with the purpose of avoiding personal liability—that officers are held jointly with the company. The foregoing are by no means cited as the only instances when the officers may be held liable, but they are sufficient for the present case."

In Powder Power Tool Corp. v. Powder Actuated

¹¹⁴ IV.123.

¹¹⁵ III.40.

¹¹⁶ III.48.

Tool Co., 7 Cir., 1956, 230 F.2d 409, the Seventh Circuit reaffirmed the rule of the *Dangler* case and reversed a finding of individual liability where the individual had never sold the article for his own account, the corporation had not been organized to carry on infringing activities and there was no showing of corporate insolvency. The court said (p. 414):

"In *Dangler v. Imperial Machine Co.*, 7 Cir., 11 F.2d 945, 946, this court said: '* * * respecting the liability of officers of a corporation for its infringements * * *. If the officers act merely as officers, they are not liable jointly with the corporation. * * * we adhere to the *Cazier v. Mackie-Lovejoy Mfg. Co.* decision (7 Cir., 138 F. 654), and hold that, in the absence of some special showing, the managing officers of a corporation are not liable for the infringements of such corporation, though committed under their general direction.' In our opinion that part of the judgment holding Frank J. Klunk, Sr., personally liable is clearly erroneous. *Trico Products Corp. v. Ace Products Corp.*, D.C., 30 F.2d 688, 689."

The rule of the *Dangler* case has been followed in the Ninth Circuit.¹¹⁷

In this circuit it is only in a case where the court has found that an individual dominated a corporation or used the corporation as a front to cover up infringing activities that the individual was held liable along with

¹¹⁷ *Wisconsin Alumni R.F. v. Vitamin Technologists*, D.C. Cal., 1941, 41 F. Supp 857, affirmed in part (with respect to personal liability of corporate officers), 9 Cir., 1945, 146 F.2d 941; and *Zell v. Bankers' Utilities Co.*, 9 Cir., 1935, 77 F.2d 22.

the corporation.¹¹⁸

There was no showing of any special circumstances such as to hold the Jeddellohs personally liable. Quite the contrary, everything indicates that they functioned completely within their capacities as officers and employees of defendant corporation, Jeddelloh Brothers Sweed Mills, Inc., which is a legitimate solvent corporation organized in 1955 to go into the business of manufacturing gang saws. Defendant corporation went into the business of manufacturing veneer dryer feeders at the request of a plywood-manufacturing mill. Fred Jeddelloh was in charge of the business aspects of the company, and his brother, Otto, was responsible for engineering and machine design.¹¹⁹ There is no suggestion that they acted other than as corporate employees.

The District Court held that infringement was not willful or wanton¹²⁰ and that they had not made a Chinese copy of the patented machine.¹²¹ Under these circumstances, the individual defendants should have been held free of personal liability.

The Amount of Damages Has Been Incorrectly Determined

It was stipulated between the parties with the approval of the Court, that damages could be determined by the Court based on what a reasonable royalty would

¹¹⁸ *Moseley v. United States Appliance Corporation*, 9 Cir., 1946, 155 F.2d 25. The *Moseley* case was discussed in *Ronson Corp. v. Maruman of California, Inc.*, D.C., S.D. Cal., 1963, 224 F. Supp. 479.

¹¹⁹ I.112-116.

¹²⁰ III.10

¹²¹ IV.136, 261.

be for the use of the patented invention.¹²²

Plaintiff has never received any royalties nor had any licensees under the patent in suit.¹²³ The short history of plaintiff's licensing dates back to the original Parker patent under which plaintiff had two licensees, in the years 1956 and 1957. One of these licensees was American Manufacturing Company of Tacoma, a supplier of plaintiff which had "a special license" at a royalty of \$1,000.00 per machine for three machines, each of which sold for an average of about \$18,500.¹²⁴

The other licensee was Moore Dry Kiln Company which was licensed for a period of two years at a royalty rate of 5% of plaintiff's established selling price. Plaintiff's established selling price at that time was \$18,750, and Moore paid royalties on three feeders.¹²⁵ Mr. Duncan, Moore's president at the time of the license, testified and produced copies of correspondence between him and Mr. Milbourn showing that at the time the Moore Company became a licensee it had been charged with patent infringement.¹²⁶ Neither Mr. Milbourn nor plaintiff's attorney, Mr. Hoffman had any recollection of the patent infringement charges made against the Moore Company.¹²⁷

The character and number of royalty payments under the original Parker patent were insufficient to indicate an established royalty rate under that patent, much

¹²² IV.158.

¹²³ IV.176

¹²⁴ IV.162, 178, 212, 214; PXs 63-69.

¹²⁵ IV.164, 165, 166, 179; PXs 56-62

¹²⁶ IV.202-204, 256; DXs 301, 302

¹²⁷ IV.178, 205

less under the reissue. In a leading case on the subject of patent royalties, this Court said in *Faulkner v. Gibbs*, 9 Cir., 1952, 199 F.2d 635, 638:

"In order that a royalty may be accepted as 'established' it must have been paid prior to the infringement complained of; it must have been paid by such a number of persons as to indicate a general acquiescence in its reasonableness by those who have had occasion to use the invention; and it must have been uniform at the places where licenses were issued.

"Royalties paid under threat of suit or in settlement of claims for past infringement cannot be taken as a standard to measure the value of the patent. 'The avoidance of the risk and expense of litigation will always be a potential motive for a settlement.'"

At the hearing on what a reasonable royalty rate should be, each side called its president and a patent lawyer expert. Defendants also subpoenaed employees of plaintiff's ex-licensees American Manufacturing and the Moore Company. Additionally, defendants subpoenaed Mr. Harold Evans, the most qualified and impartial person they knew of to testify concerning royalty rates on plywood-manufacturing equipment. Mr. Evans has been director of the Plywood Research Foundation of the American Plywood Association (formerly Douglas Fir Plywood Association) for twenty years. He is completely neutral as far as the parties are concerned. Mr. Evans' work is to advance the technology of the plywood industry. He is continually dealing with improvements in plywood manufacturing and the patents thereon. In

his employment he has had wide experience in the licensing of equipment similar to that involved in the present suit. Mr. Evans was familiar with the Parker patent, with the accused machine, and with all the important factors which bear on determining a reasonable royalty rate. He stated that in his opinion, a rate of 3% of the sales price of defendants' equipment, i.e., that equipment which included the combination of a feeder and hoist, would be a reasonable royalty.¹²⁸

At the conclusion of the hearing of August 11, 1965, the District Judge announced that he was going to allow plaintiff \$750 per machine for each machine made and sold by defendants, regardless of whether the feeder was sold with or without a hoist, and regardless of the sales prices of the machines. He fixed a supersedeas bond in the amount of \$135,000.¹²⁹

On August 16, 1965, counsel for plaintiff personally presented to Judge Solomon supplemental findings of fact, order fixing damages, order denying motion for new trial and amendment of judgment. Judge Solomon forthwith signed those documents.¹³⁰ Copies of those documents were inadvertently directed to defendants' counsel at an office address—501 Pacific Building—which he had left almost a year earlier. Later, when defendants' counsel learned that the originals of the copies of the documents he had received had already been signed, he requested the Court to extend time for taking an appeal and filing supersedeas bond and grant a hear-

¹²⁸ IV.215-220

¹²⁹ IV.252, 253

¹³⁰ III.33-39

ing with respect to making certain amendments and additions to the orders which had been entered.¹³¹ Judge Solomon granted the hearing and the extension of time but struck out the amount of the supersedeas bond on the order submitted.¹³² Thereafter, at the hearing on August 26, 1965, the Court stated that it had erred previously when it allowed a royalty of \$750 per each of the defendants' machines and raised the royalty to \$825 per machine which the Court said was 5% of the sales price of the accused machine.¹³³

Defendants submit that under all the circumstances of the case, an award of \$825 per machine, or 5% of defendants' maximum selling price, is unjustified and clearly erroneous. The clear weight of credible evidence which was introduced regarding the amount of damages, supports a royalty of no more than 3% of the selling price on defendants' machines—those which included the combination of a feeder and hoist.

During the course of this litigation, there has been considerable doubt about whether the accused apparatus infringes claim 17 of the Parker reissue patent. The Trial Judge at first believed that the claim was not infringed, and five years later changed his mind. Throughout that period defendants were making and selling the accused machines. After his second opinion, the Trial Judge expressly stated on several occasions that defendants' equipment was not a Chinese copy of plaintiff's

¹³¹ III.78-80

¹³² III.42, 81, 82

¹³³ IV.261, 271

equipment.¹³⁴ Under such circumstances, it would be erroneous for a court to adopt as a measure of damages, a royalty rate substantially the same as that paid by licensees who were permitted to use and copy the whole invention. In effect, this is what the District Court did in computing damages on the basis of a 5% royalty, which is substantially the same amount paid by American Manufacturing and Moore.

Even if it were appropriate to measure damages by a royalty paid under prior licenses, the American and Moore licenses do not justify the court's award. Those license agreements arose under special circumstances where plaintiff had a decided advantage in demanding and obtaining a high royalty rate. In the case of American Manufacturing, the license related to the sale of three machines, and its terms were literally dictated by plaintiff which was and is a customer of American.¹³⁵ In the case of the Moore Company, the license was taken under threat of patent infringement.¹³⁶ The royalties paid under those licenses were hardly a matter of negotiations between the parties.

An additional reason for limiting the royalty here to 3% is that we are dealing with infringement of only a single claim of plaintiff's reissue patent. Even if 5% were the royalty which plaintiff would get in a negotiated license, plaintiff is not entitled to a 5% royalty from an infringer of only one of the twenty-five claims in the patent. Tenuous infringement of only one claim does not

¹³⁴ IV.131, 261

¹³⁵ III.212, 213, 214

¹³⁶ III.202; DXs 301, 302

justify a royalty as high as that paid by American and Moore for licenses under the entire patent.

In *Philp v. Nock*, 1873, 17 Wall. 460, 462, the Supreme Court said:

"Where the infringement is confined to a part of the thing sold, the recovery must be limited accordingly. It cannot be as if the entire thing were covered by the patent; or, where that is the case, as if the infringement were as large as the monopoly."

And in *Wooster v. Simonson*, C.C. S.D., N.Y., 1883, 16 Fed. 680, the court said, with respect to infringement damages, that the value of the entire property in an invention does not furnish a criterion of the value of a part, or of the right to use a part, in the absence of evidence to show the relative difference in value between the whole and the part. Also, in *Hunt Bros. Fruit Packing Co. v. Cassidy*, 9 Cir., 1892, 53 Fed. 257, with reference to infringement damages, the court said that the proof of a license fee for two improvements which were expressed in two claims in the patent in suit, is not competent to show the damage sustained by an infringement of only one of the improvements expressed in one of the claims.¹³⁷

Not only has the District Court arrived at too high a royalty figure, but also, it has erred in its application of the amount. During the period in which defendants are

¹³⁷ See also Deller's Walker on Patents, Vol. III, § 828 at page 2163:

"Where an infringement was less in extent or duration than the corresponding acts which were authorized by the licenses which established the royalty, it is but just that the damages should be assessed at correspondingly smaller sums."

charged with infringement, they sold feeders alone as well as the feeder and hoist combinations which are concerned in this suit. The District Court found that only claim 17 had been infringed, and in order to do this, it had to construe that claim to cover the combination of a feeder and hoist. Thus, no royalty should be owing on the sales of feeders alone, since only the sale of a feeder and hoist in combination can infringe the claim.

As of August 26, 1965, defendants had sold 169 feeder and hoist combinations for a total sales price of \$2,537,247.70.¹³⁸ Defendants also had sold nine feeders alone, without hoists, for a total price of \$96,000. Defendants submit that this latter amount should not be included in the computation of damages.¹³⁹

Finally, from the date (1958) on which defendants first started making and selling feeders to the present, the selling price of defendants' feeder and hoist combinations has varied from \$10,000 to \$16,500. In view of this variation, which is a matter of record ascertainable from defendants' invoices,¹⁴⁰ it was error to apply a per-machine charge which is identical for each machine sold. Whatever percentage royalty rate may ultimately be applied in the event this Court concludes that plaintiff is entitled to damages, should be applied to the exact sale price of each infringing machine.

For these reasons, defendants submit that the damages awarded by the District Court were excessive and

¹³⁸ DXs 152-291

¹³⁹ DXs 292-300

¹⁴⁰ DXs 152-291

erroneous, and should be reduced if this Court sustains plaintiff's right to any recovery.

CONCLUSION

For the reasons set forth above, the judgment of the District Court should be reversed, and the complaint dismissed.

Respectfully submitted,

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M. H. HARTWELL, JR.
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Portland, Oregon 97204
Attorneys for Appellants and
Cross-Appellees

CERTIFICATE OF COUNSEL

I certify that, in connection with the preparation of this brief, I have examined Rules 18 and 19 of the United States Court of Appeals for the Ninth Circuit, and that, in my opinion, the foregoing brief is in full compliance with those rules.

J. PIERRE KOLISCH
Attorney for Appellants and
Cross-Appellees

APPENDIX

PLAINTIFF'S EXHIBITS

FIRST TRIAL IN DISTRICT COURT, VOL. I

Exhibit No.	Identified	Offered	Received	Rejected
1-2 inc.	Pretrial Order	278	278	
3-4 inc.	"	171	171	
5-6 inc.	"	278	279	
8	"	278	279	
13	"	276	276	
20	"	277	277	
20a	"	278	278	
21	"	277	277	
21a	"	278	278	
22	"	277	277	
22a	"	278	278	
23-50 inc.	"	280	280	
51-54 inc.	282	282	282	
55	283	283	283	

DEFENDANTS' EXHIBITS

FIRST TRIAL IN DISTRICT COURT, VOL. I

Exhibit No.	Identified	Offered	Received	Rejected
101-123 inc.	Pretrial Order	162	162	
124	165	162	162	
125-128 inc.	153	153	153	253
129	149	149*		150†
130-131 inc.	148	148	148	
132-134 inc.	140	140	140	
135-140 inc.	162	162	162	
141	140	140,	140	
		254	254	
142	254	256	256	
143	276	276	276	
144				

* Offered again in Vol. IV.31.

† Rejected again in Vol. IV.32.

PLAINTIFF'S EXHIBITS

TRIAL ON REMAND, VOL. IV

Exhibit No.	Identified	Offered	Received	Rejected
56-61 inc.	164	168	168	
62		168	168	
63-67 inc.	161	168	168	
68-69 inc.		168	168	
70	170	168	168	
71		168	168	
72	167	168	168	
73	247	247	247	

DEFENDANTS' EXHIBITS

TRIAL ON REMAND, VOL. IV

Exhibit No.	Identified	Offered	Received	Rejected
150	168	168	168	
151	211	211	211	
152-291 inc.	255	255	255	
292-300 inc.	255	255	256	
301-302 inc.	256	256	256	

SPECIFICATION OF

M.T.O.O. OF OPERATION FOR THE SHORT TIPPLE VENEER DRYER FEEDER, MODEL 58

PURCHASER

DATE

JUNE 27, 1958

TYPED BY

J. H. POLIZ

CHECKED BY

J. H. POLIZ

APPROVED BY

J. H. POLIZ

DRAWING PART NO. QUANTITY DESCRIPTION REMARKS

REFERENCE DRAWINGS

A-20607-1

GENERAL ARRANGEMENT OF SHORT TIPPLE VENEER DRYER FEEDER

A-20727

TIMING DEVICE ASSEMBLY

B-17451-1

SCHEMATIC ELECTRICAL CIRCUIT AND WIRING DIAGRAM

B-17534

SWITCH LAYOUT

PURPOSE OF THE MODEL 58 FEEDER

1. THE COE MODEL 58 SHORT TIPPLE TYPE VENEER DRYER FEEDER IS A MACHINE INTENDED TO MAKE IT POSSIBLE FOR A SINGLE OPERATOR TO OPERATEALLY FEED ROLLS OF VENEER FROM A STACK INTO THE FEED SECTION OF THE VENEER DRYER. THE MACHINE WILL FEED THE DRYER ROLLS IN A DEFINITE SEQUENCE AND AT A TIME CYCLE, DEPENDENT ON DRYING TIME AND VENEER LENGTH, SO THAT THE DRYER IS FILLED TO ITS MAXIMUM CAPACITY AT ALL TIMES AND THIS PROVIDING THE MAXIMUM PRODUCTION FROM THE DRYER. THE MACHINE WILL HANDLE ANY VENEERS 40 INCHES OR LONGER.

ARRANGEMENT & DESCRIPTION OF ALL EQUIPMENT

2. THE MODEL 58 FEEDER AND ASSOCIATED EQUIPMENT IS GENERALLY ARRANGED AS SHOWN ON DRAWING A-20607-1. STACKS OF GREEN VENEER ARE PLACED ON THE FEEDER PLATFORM. THE FEEDER PLATFORM IS A CONCRETE SLAB 10 FEET LONG AND 4 FEET WIDE. THE VENEER IS STACKED IN A STAIR CASE MANNER, WITH THE TOP OF THE STACK BEING 10 FEET FROM THE FEEDER. THE FEEDER PLATFORM IS 10 FEET FROM THE FEEDER. THE MODEL 58 FEEDER IS A SINGLE UNIT ASSEMBLY POSITIONED TO LINE UP WITH THE FIRST ROLL OF THE DRYER FEED SECTION DRIES.
3. THE MODEL 58 FEEDER IS A SELF CONTAINED ASSEMBLY CONSISTING OF A STRUCTURAL STEEL AND WELDED FRAME SUPPORTING A TIPPLE ASSEMBLY. THE RECEIVING SIDE OF THE TIPPLE CONTAINS A PINCH ROLL ASSEMBLY. THE LOWER ROLL IS A CONTINUOUS ROLL IN A FIXED POSITION. THE UPPER PINCH ROLL CONSISTS OF MANY INDIVIDUAL REEFER WHEELS. AIR CYLINDERS ARE ARRANGED TO RAISE AND LOWER THE TOP ROLL. A STOP GATE ON POSITIONING GUIDE, IS LOCATED BEHIND THE PINCH ROLLS. THE DISCHARGE END CONTAINS A SECOND SET OF PINCH ROLLS NEXT TO THE FIRST ROLL OF THE DRYER FEED SECTION. THIS SET OF PINCH ROLLS REMAIN CLOSED AT ALL TIMES.
4. THE ACTION OF THE ROIST AND TIPPLES ARE CONTROLLED BY A TIMING DEVICE SHOWN ON DRAWING A-20727. BRIEFLY THIS TIMING DEVICE CONSISTS OF WHEEL, DRIVEN FROM THE ROIST DRIVE SHAFT, WITH AN ADJUSTABLE CAM FOR EACH DECK OF THE FEED SECTION. THE CAMS ARE ADJUSTED TO THE LENGTH OF THE WHEEL. TWO LIMIT SWITCHES (IS-5 AND IS-6) ARE TRIPPED BY THE CAMS TO STOP THE ROIST ACTION AND PLACE THE DISCHARGE PINCH ROLLS OF THE FEEDER OPPOSITE THE DECKS OF THE DRYER FEED SECTION.
5. THE TIME CYCLE AVAILABLE TO LOAD EACH DECK OF THE DRYER IS DEPENDENT ON THE DRYING TIME OF THE PARTICULAR VENEER. THE NUMBER OF DECKS IN THE DRYER AND THE LENGTH OF THE VENEERS. THE ACCURATE MEASUREMENT OF THIS TIME CYCLE IS CONTROLLED BY A SMALL ADJUSTABLE SPEED TRANSMISSION UNIT DRIVEN FROM THE DRYER AND OPERATES TWO LIMIT SWITCHES, IS-9 AND IS-10 CONTROLLING THE INFEED AND FEED TIME. STARTER DRIVE IS FROM THE DRYER, CHANGES IN DRYER SPEED WILL AUTOMATICALLY CHANGE THE FEED TIME CYCLE. THE TRANSMISSION IS ONLY CHANGED WHEN CHANGING LENGTH OF VENEER TO BE FEED INTO THE DRYER.
6. ASSUME A FULL LOAD OF VENEER IS IN POSITION IN FRONT OF THE FEEDER AND THE TOP OF THE LOAD IS IN LINE WITH THE OPENING BETWEEN THE RECEIVING PINCH ROLLS OF THE FEEDER. SEE A-20607-1. ASSUME THE TIPPLE OF THE P DRYER IS IN ITS LOWER POSITION IN LINE WITH THE LOWEST (#1) DECK OF THE DRYER FEED SECTION, AND THAT THE DRYER AND FEEDER ARE RUNNING.
7. THE OPERATOR PUSHES SHEET OF VENEER FROM THE TOP OF THE LOAD INTO THE OPENING BETWEEN THE RECEIVING PINCH ROLLS AND COMPLETELY FILLS THE ENTIRE LENGTH OF PINCH ROLLS. THE STOP GATE DESCRIBED IN PARAGRAPH 3 IS IN ITS DOWN POSITION AND SERVES TO ALIGN THE ROLLS OF ALL DECKS OF VENEER.
8. THE ELECTRICAL CIRCUIT IS IN THE CONDITION SHOWN ON B-17451-1. WHEN THE DRYER HAS GIVEN THE VARIABLE TRANSMISSION THRU ITS CYCLE THE CAM ON THE OUTPUT SHAFT OF THE TRANSMISSION WILL TRIP IS-10 AND CLOSE THE CIRCUIT TO THE SOLENOID VALVE. THIS VALVE OPERATES THE AIR CYLINDERS AND CLOSURE THE ROLL AND RAISES THE STOP GATE. THE ROLLS FULL THE VENEER FROM THE TOP OF STACK AND THEN THE FEEDER DISCHARGE PINCH ROLLS FEED THE VENEER INTO THE LOWER (#1) DECK OF THE FEED SECTION. THE CAM HOLDING IS-10 NOW RELEASES IT TO DE-ENERGIZE THE SOLENOID VALVE AND OPEN THE PINCH ROLLS AND LOWER THE STOP GATE. THE OPERATOR MAY NOW PUSH THE NEXT LOAD OF VENEER INTO THE FEEDER AT HIS CONVENIENCE. AS THE HEIGHT OF THE VENEER STACK DECREASES THE OPERATOR SHOULD RAISE HIS ELEVATOR OR ROIST TO MAINTAIN THE STACK LEVEL WITH THE PINCH ROLLS OF THE FEEDER.
9. AFTER THE FIRST LOAD OF VENEER ENTERS COMPLETELY INTO THE LOWER (#1) DECK OF THE DRYER AND IS-10 IS RELEASED, THE CAM ON THE TRANSMISSION UNIT WILL TRIP IS-9. THIS CLOSURE THE CIRCUIT THRU IS-9, IS-6, IS-10, IS-5 AND WELDED WIRE. THE TRANSMISSION OPERATES THE ROIST MOTOR AND ROIST TO MOVE THE TIPPLE IN THE "UP" DIRECTION. INTERLOCK CONTACT IN OF THE STARTER CLOSURE BETWEEN LINES 1 AND 4 TO HOLD THE MOTOR CIRCUIT AFTER THE TRANSMISSION UNIT RELEASES IS-9.
10. THE TIPPLE CONTINUES TO MOVE UPWARD AND THE ROIST SHAFT IS NOW ROTATING THE DISC AND CAMS OF THE TIMING DEVICE. A-20727. AS THE DISCHARGE ROLLS OF THE FEEDER COME INTO POSITION OPPOSITE THE SECOND DECK OF THE DRYER FEED SECTION, THE FIRST CAM TO IN THE TOWER WILL TRIP IS-5. THIS ACTION OPENS THE CIRCUIT TO THE IN MOTOR STARTER, THE MOTOR STOPS AND THE MAGNETIC UNBRAKE (BUILT INTO THE MOTOR) HOLDS THE FEEDER TIPPLE IN ALIGNMENT WITH THE #2 DECK OF THE FEED SECTION.
11. AFTER THE PROPER TIME HAS PASSED THE TRANSMISSION UNIT WILL AGAIN TRIP IS-10 TO FEED THE VENEER INTO THE SECOND DECK IN EXACTLY THE SAME MANNER AS DESCRIBED IN PARAGRAPH 8. THESE FUNCTIONS DESCRIBED IN PARAGRAPH 8, 9, 10 AND 11, REPEAT THEMSELVES TO FEED VENEER INTO SUCCESSIVELY HIGHER DECKS UNTIL THE FEEDER TIPPLE REACHES THE TOP DECK OF THE DRYER.
12. WHEN THE ROIST LIFTS THE TIPPLE INTO POSITION AT THE TOP DECK THE TIMING DEVICE DOES NOT TRIP IS-5 AS PREVIOUSLY DESCRIBED BUT A SPECIAL CAM TIO TRIPS IS-6. LIMIT SWITCH IS-6 OPENS THE CIRCUIT TO THE IN MOTOR STARTER AND STOPS THE TIPPLE IN POSITION AT THE TOP DECK. IS-6 ALSO HAS A SECOND CIRCUIT WHICH NOW CLOSURE IN THE CIRCUIT TO THE IN MOTOR STARTER BUT STARTER ID DOES NOT OPERATE AT THIS TIME BECAUSE IS-9 AND ID INTERLOCK ARE OPEN.

PLAINTIFF'S EXHIBITS

TRIAL ON REMAND, VOL. IV

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62		168	168	
63-67 inc.	161	168	168	
68-69 inc.		168	168	
70	170	168	168	
71		168	168	
72	167	168	168	
73	247	247	247	

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151	211	211	211	
152-291 inc.	255	255	255	
292-300 inc.	255	255	256	
301-302 inc.	256	256	256	



PLAINTIFF'S EXHIBIT 2

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 1

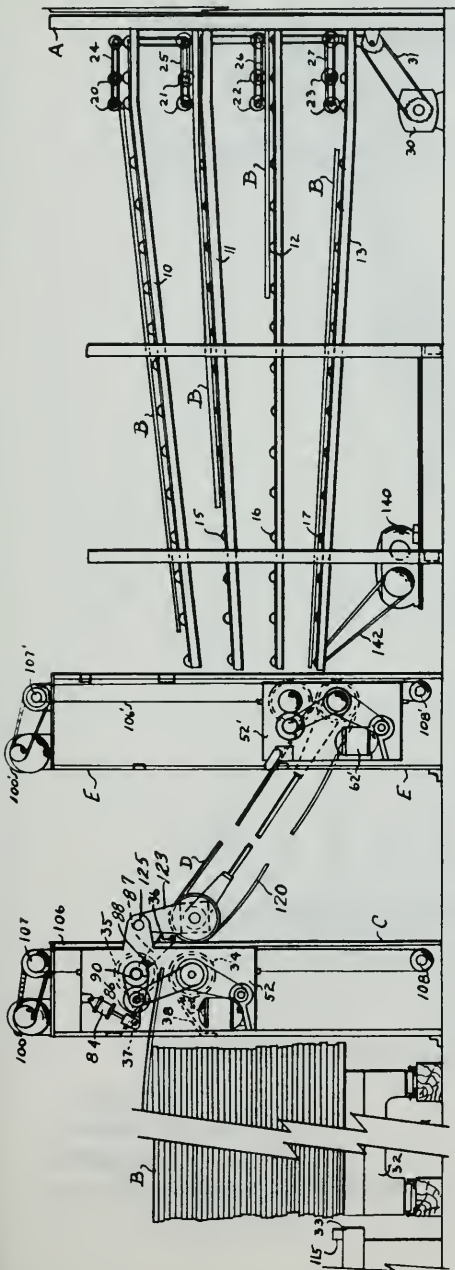


FIG. 1

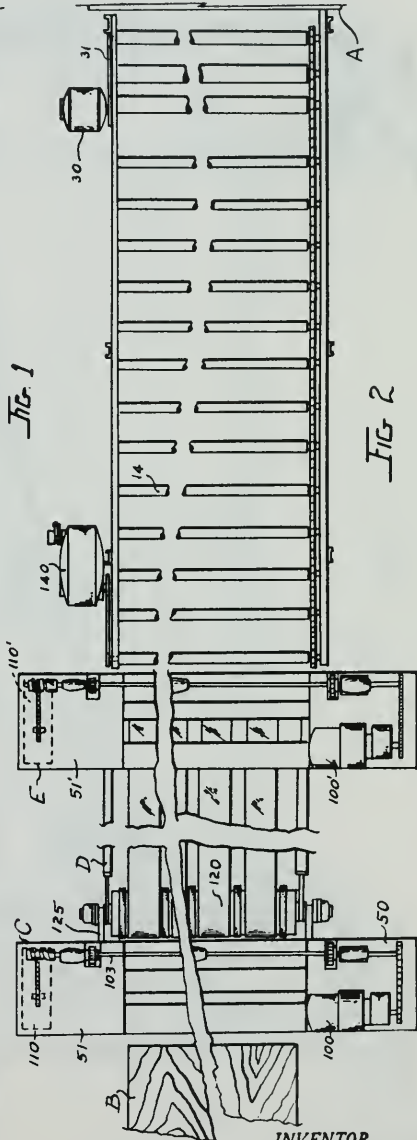


FIG. 2

INVENTOR.

Clarence E. Parker

BY Hudson, Boughton,

Williams, David & Hoffman

ATTORNEYS

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 2

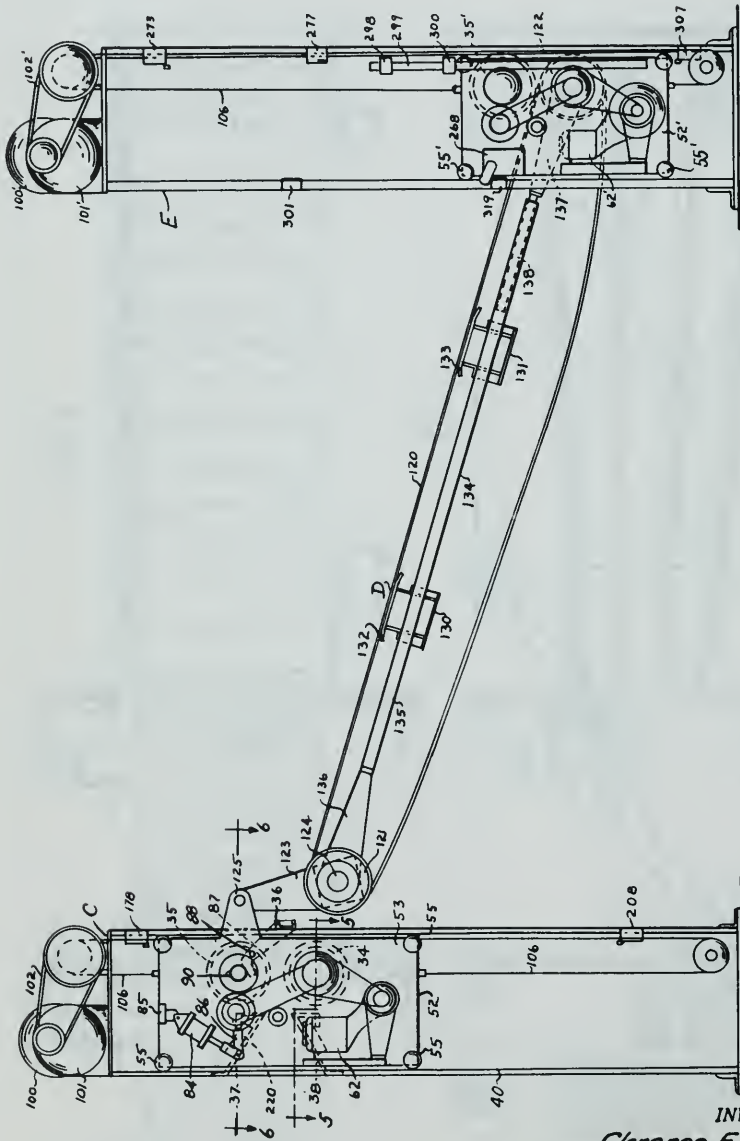


FIG. 3

INVENTOR.

Clarence E. Parker

BY Hudson, Boughton,

Williams, David & Hoffmann.

ATTORNEYS

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 3

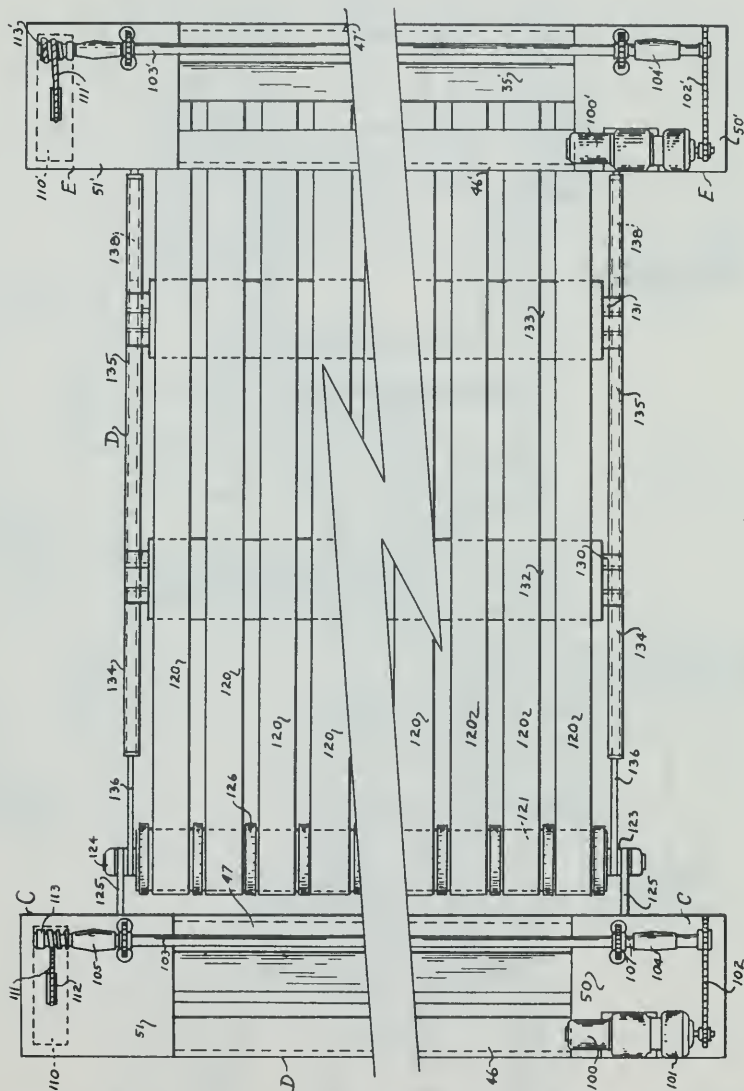


FIG. 4

INVENTOR.

Clarence E. Parker

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Williams, David & Hoffmann
ATTORNEYS

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 4

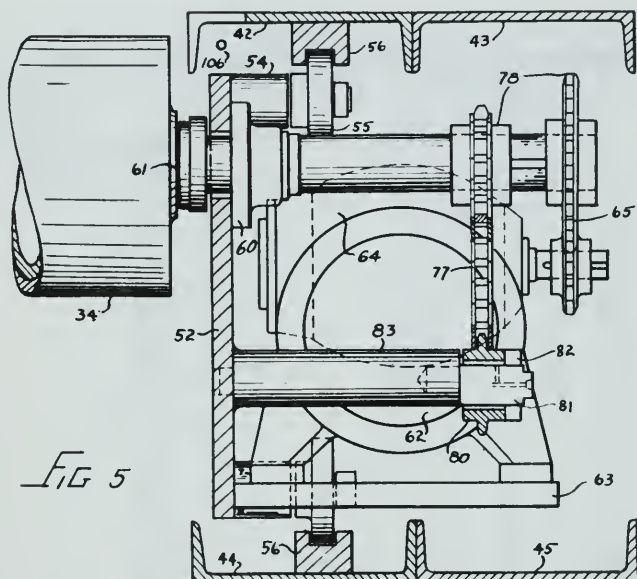


FIG 5

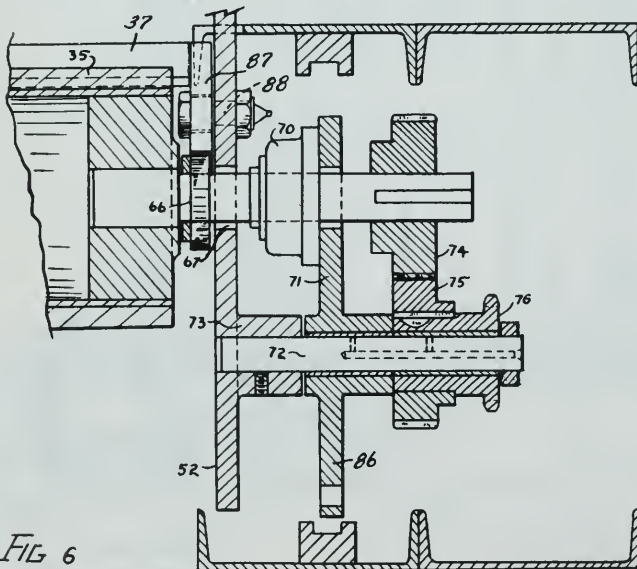


FIG 6

INVENTOR.

Clarence E. Parker
 BY Hudson, Boughton,
 Williams, David & Hoffmann.
 ATTORNEYS

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

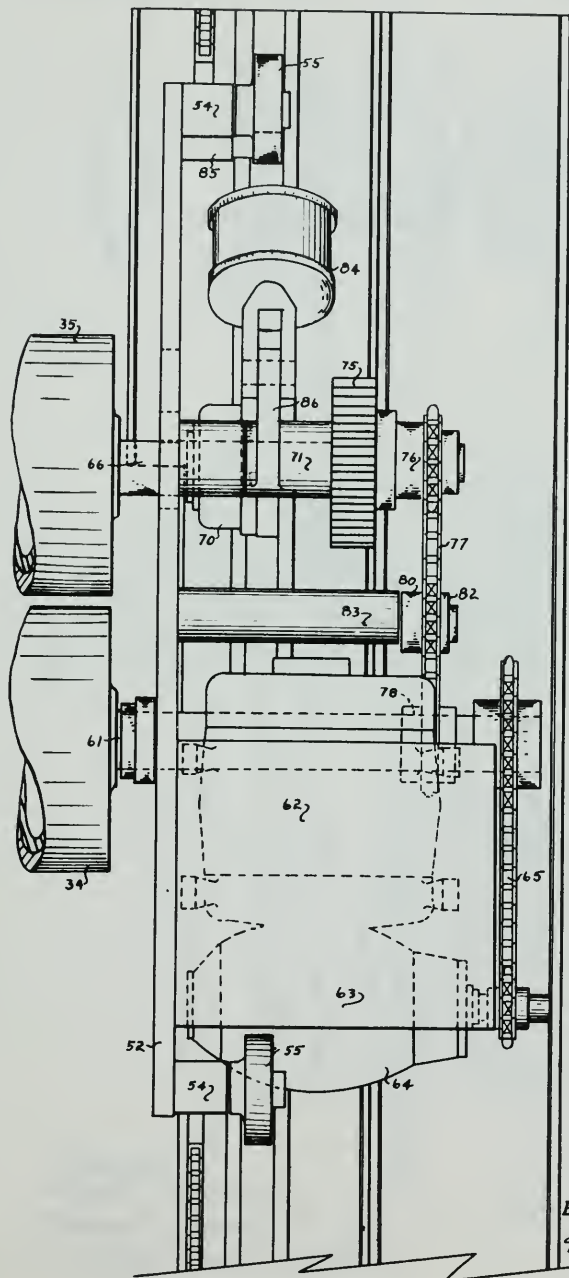


FIG. 7

INVENTOR.
Clarence E. Parker
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Williams, David & Hoffmann.
ATTORNEYS

April 21, 1959

C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 6

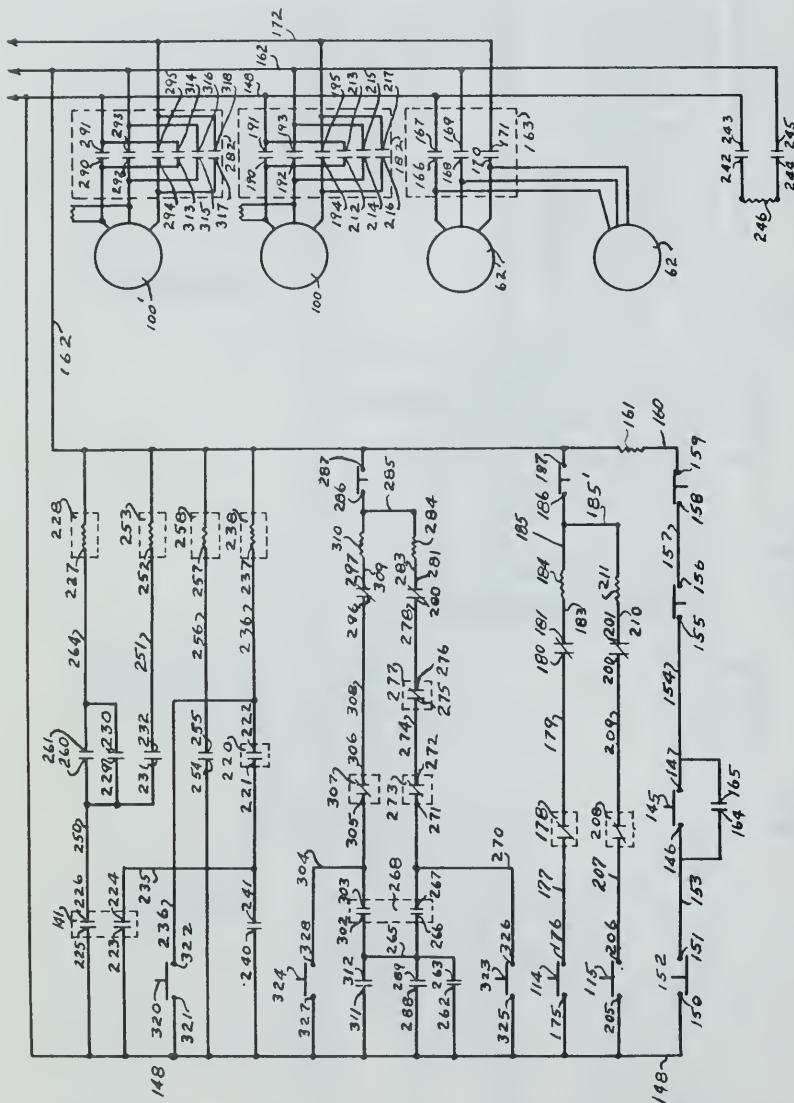


FIG. 8

INVENTOR.

Clarence E. Parker

BY Hudson, Boughton,

Williams, David & Hoffmann.

ATTORNEYS

April 21, 1959

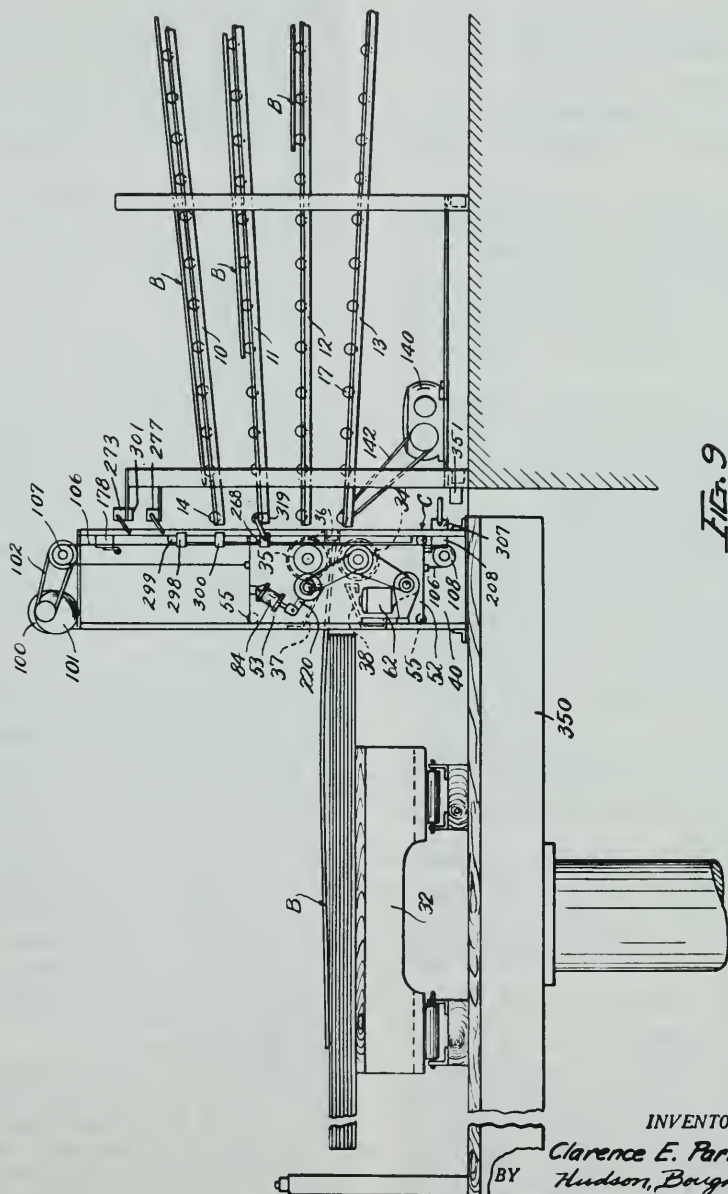
C. E. PARKER

Re. 24,638

APPARATUS FOR HANDLING VENEER

Original Filed Aug. 4, 1948

7 Sheets-Sheet 7



INVENTOR.

Clarence E. Parker

BY Hudson, Boughton,
Williams, David & Hoffmann,
ATTORNEYS

1

24,638

APPARATUS FOR HANDLING VENEER

Clarence E. Parker, Painesville, Ohio, assignor to The
Coe Manufacturing Company, Painesville, Ohio, a cor-
poration of Ohio

Original No. 2,649,182, dated August 18, 1953, Serial
No. 42,373, August 4, 1948. Application for reissue
October 23, 1958, Serial No. 775,668

25 Claims. (Cl. 198—21)

Matter enclosed in heavy brackets [] appears in the
original patent but forms no part of this reissue speci-
fication; matter printed in italics indicates the additions
made by reissue.

The present invention relates to material handling ap-
paratus of the feeder type and, more particularly, to ap-
paratus for feeding veneer to a multiple deck conveyor
type veneer dryer from a stack of veneer.

The principal object of the invention is the provision of
a simple, inexpensive and reliable apparatus for feeding
veneer from a stack of veneer to a multipledeck con-
veyor type veneer dryer with minimum effort on the part
of an operator.

A more specific object of the invention is the provision
of a novel and improved apparatus for feeding veneer
from a stack of veneer to a multiple deck conveyor type
veneer dryer in predetermined relation upon the top piece
of a stack of veneer being pushed forwardly of the stack
proper a small amount by an operator.

The invention resides in certain constructions and com-
binations and arrangements of parts and further objects
and advantages will be apparent to those skilled in the art
to which it relates from the following description of the
preferred embodiment described with reference to the ac-
companying drawings forming a part of this specification
in which similar reference characters designate corre-
sponding parts, and in which—

Fig. 1 is a side elevational view of apparatus embody-
ing the present invention for feeding veneer to a conveyor
type veneer dryer;

Fig. 2 is a plan view of the apparatus shown in Fig. 1.

Fig. 3 is an enlarged, side elevational view of the feeder
mechanism proper shown in Figs. 1 and 2;

Fig. 4 is a fragmentary, enlarged plan view of the mech-
anism shown in Fig. 2;

Fig. 5 is a sectional view, with portions in elevation,
approximately on the line 5—5 of Fig. 3;

Fig. 6 is a sectional view, with portions in elevation,
approximately on the line 6—6 of Fig. 3;

Fig. 7 is a fragmentary, elevational view, with portions
broken away, looking at the right-hand end of the appar-
atus shown in Fig. 3;

Fig. 8 is a wiring diagram of the electrical circuits of
the apparatus; and

Fig. 9 is a side elevational view showing a different
embodiment of the invention.

Referring to Figs. 1 to 8 of the drawings which show
the preferred embodiment, the reference character A
designates the in-feed end of a four-deck, conveyor type,
veneer dryer of commercial construction. The dryer A
is not herein shown and described in detail because dryers
of the type referred to are well known in the art and
the dryer per se forms no part of the present invention. As
shown, the dryer comprises four decks 10, 11, 12, 13 of
infeed rollers 14, 15, 16, 17, respectively. The rollers of
the respective decks are all driven at a predetermined
uniform speed by suitable means, such as, a sprocket chain,
and operate to move sheets of veneer, indicated by the
reference character B, to pairs of top rollers 20, 21, 22

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the right-hand ends of the decks 10, 11, 12, 13, respective-
ly, to feed the veneer to the dryer proper. As shown,
the pairs of top rollers 20, 21, 22, 23 are carried by arms
24, 25, 26, 27 pivoted at their right-hand ends on trans-
versely extending shafts located above the plane of the
decks proper. Gravity holds the top rollers in engagement
with the top sides of the sheets of veneer. The rollers of
the various decks are driven, as shown, from an electric
motor 30 connected thereto by suitable sprocket chains,
designated generally by the reference character 31, and
the ends of the decks toward the feeding mechanism
proper, hereinafter more specifically described, converge
toward each other; however, this is not essential to the
present invention and the decks may be otherwise ar-
ranged.

The usual practice is to bring the veneer to the dryer
on trucks and have workmen remove the veneer from the
trucks and feed it into the various decks of the dryer by
hand. The present invention does not contemplate any
change in the conventional manner of bringing the veneer
to the dryer and, as shown, the veneer B is brought to the
infeed end of the dryer A, or, more specifically, to the in-
feed end of the feeding mechanism stacked upon a truck
32 of conventional construction. The operator either
standing upon the floor or upon a raised platform 33 push-
es the top piece of veneer on the stack between the rub-
ber covered pinch rolls 34, 35 of the feed end unit C
of the feeding mechanism until it strikes a stop 36. The
pinch rolls 34, 35 are movable vertically, as will be here-
inafter described, so that the pinch rolls can be main-
tained in substantial alignment with the top of the stack
of veneer upon the truck, thereby facilitating the feeding
of the top piece of veneer between the pinch rolls. Guide
members 37, 38 extending transversely across the feed
end unit in front of the pinch rolls 34, 35 provide means
for guiding the veneer into the feed end unit even though
the pinch rolls are not exactly aligned with the top of the
stack of veneer.

The feeding mechanism comprises the feed end unit C,
a floating conveyor or guide table D, and a discharge end
unit E. The feed end unit C comprises a frame and a
vertically movable assembly. The frame includes right
and left-hand vertical columns 40, 41, each composed of
four channel irons 42, 43, 44, 45 arranged as clearly
shown in Fig. 5. In addition to the channel irons referred
to, the frame comprises transversely extending angle mem-
bers 46, 47 connected to the top of the channel members
and by right and left-hand top plates 50, 51 to each other.
The vertically movable assembly of the feed end unit C
includes vertically movable end plates 52 housed within
the columns 40, 41 and having suitable tubular members
54 welded thereto for supporting rollers 55, one located
at each of the four corners of the frames. The rollers 55
engage within suitable tracks 56 at opposite sides of the
columns and guide the movable plates 52 during their
vertical movement. The tracks or guides 56 are carried
by the inner channel irons 42, 44.

Opposite plates 52 of the vertically movable assembly
of the feed end unit C are provided with suitable bearings
60 welded thereto for supporting the shaft-like ends 61
of the bottom roll 34. The right-hand end of the shaft 61
extends beyond the bearing 60 and is adapted to be driv-
en from an electric motor 62 mounted on a plate 63
welded to the right-hand plate 52 of the vertically movable
assembly and operatively connected to the shaft 61
through a gear reduction 64 and a sprocket chain drive,
designated generally by the reference character 65.

The upper roll 35 of the feed end unit C is similar
to the lower roll 34 and includes shaft-like extensions
66 projecting from opposite ends, which shaft-like exten-
sions project through elongated slots 67 in the plates

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fixedly connected to the free ends of levers 71 pivoted about stud shafts 72 connected to the plates 52 by sleeve members 73 welded to the plates 52. The right-hand end of the roll 35 is adapted to be driven by a pair of gears 74, 75, the former of which is keyed to the right-hand end of the shaft 66 and the latter to the hub of a sprocket wheel 76 rotatably supported on the projecting end of the shaft 72. The sprocket wheel 76 is adapted to be driven from the shaft 61 by a sprocket chain 77 operatively connected to the sprocket wheel 76 and to a sprocket wheel 78 keyed to the shaft 61. An idler sprocket wheel 80 is supported on an eccentric 81 and held assembled thereon by a nut 82. The eccentric 81 is adjustably carried by a pin 83 welded to the adjacent plate 52 and provides means for adjusting the tension of the sprocket chain 77. The construction just described is such that the two pinch rolls 34 and 35 are rotated at uniform speed by the motor 62.

The weight of the upper roll 35 tends to keep it in engagement with the lower roll 34 but the upper roll 35 is normally maintained in spaced relation to the lower roll by fluid pressure operated motors 84, one at either side of the in-feed unit C, the cylinder assemblies of which are pivotally connected to brackets 85 fixed to the plates 52 and the piston assemblies of which are pivotally connected to arms 86 formed integral with the arms or levers 71 which carry the bearings 70 for the upper roll 35. The control for supply of pressure fluid to the motors 84 will be hereinafter specifically referred to and is such that the motors 84 can be operated to move the upper roll 35 toward and from the lower roll 34 and during the operation of the machine this is automatically effected periodically to feed a piece of veneer, the end of which has been pushed into the opening between the pinch rolls 34, 35 by the operator.

A suitable stop in the form of a transversely extending channel member 36 normally positioned in the path of veneer being pushed between the pinch rolls 34, 35, limits the forward movement of the veneer as it is pushed forward by the operator. The stop 36 is fixedly connected to the right-hand end of levers 87 pivotally connected intermediate their ends to the plates 52 by pivots 88. The oppositely extending, free ends of the arms 87 project underneath antifriction bearings 90 on the shaft-like part 66 of the upper roll 35 and when the upper roll is lowered, the engagement between the bearing members 90 and the ends of the levers 87 will cause the levers 87 to be pivoted about their pivots 88 and the stop or channel member 36 raised out of the path of the veneer.

The vertically movable assembly of the feed end unit C and the operating mechanism forming a part thereof or connected thereto, including the pinch rolls 34, 35 and the feed end of the floating conveyor table D, are adapted to be moved vertically so that the pinch rolls will be aligned or approximately aligned with the top of the stack of veneer upon the truck 32 by an infeed end unit, reversible electric hoist motor 100 including a solenoid release brake and connected by a gear reduction unit 101 and a sprocket chain drive 102 to a transversely extending shaft 103 extending across the top of the frame of the feed end unit C and rotatably supported in a plurality of bearings 104, 105. The shaft 103 is connected to the vertically movable plates 52 by a sprocket chain 106, opposite ends of which are connected to the plates 52 and which sprocket chains encircle upper and lower sprocket wheels 107, 108. The upper sprocket wheels 107 are keyed to the shaft 103 and the lower sprocket wheels 108 are rotatably connected to the side columns of the feed end unit C adjacent to the floor. The weight of the vertically movable assembly is counterbalanced by a weight 110 slidably supported between the two outside channel members of the left-hand column of the frame of the

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end of the shaft 103 by a cable 111 connected thereto and, after passing over a sheave 112, rotatably supported at the top of the left-hand column of the frame to a drum 113 keyed to the left-hand end of the shaft 103. The hoist motor 100 may be operated in opposite directions to raise and lower the vertically movable assembly and align the pinch rolls 34, 35 with the top of the stack of veneer on the truck 32 by the operator through suitable control means, such as, foot-operated switches 114, 115 on the platform 33, the former of which causes the motor 100 to operate in one direction when depressed and the latter in the opposite direction.

The floating conveyor table D comprises a plurality of belts 120 encircling rolls 121, 122 at opposite ends of the table. The roll 121 adjacent to the in-feed unit C is rotatably supported to the lower end of levers 123, one located at each end of the roll, by shaft-like extensions 124 on the roll proper. The upper ends of the levers 123 are pivotally connected to projections 125 on opposite plates 52 of the vertically movable assembly of the feed end unit C. The lower or exit end roll 122 forms a part of the discharge end unit E which is similar in construction to the feed end unit C and is not herein shown and described in detail; however, the corresponding parts, with the exception of the roll 122, are designated by the same reference characters with prime marks added. The roll 122 comprises shaft-like extensions on opposite ends of the roll proper, which extensions are rotatably supported in suitable bearings welded to the plates 52' of the vertically movable assembly of the discharge end unit E. The roll 122 occupies the same position in the discharge end unit E that the roll 34 occupies in the feed end unit C but is slightly different in construction from the roll 34 because it carries the belts 120 whereas the roll 34 directly engages the veneer. The belts 120 are maintained in predetermined spaced relation to each other in the rolls 121, 122 by bands 126 of belting encircling the rolls and fixed thereto in some suitable manner.

The belts 120 are supported intermediate the rolls 121, 122 by transversely extending beams 130, 131 provided with top plates 132, 133 upon which the upper reaches of the belts 120 rest. Opposite ends of the beams 130, 131 are supported by side assemblies 134 comprising tubular members 135 to which the transversely extending beams 130, 131 are directly connected and end members 136, 137. The end members 136 are pivotally connected to the shaft-like extensions 124 of the roll 121 and are fixedly secured to the tubular members 135 as by being welded thereto. The lower end members 137 are pivotally connected to the shaft-like extensions of the roll 122 and have elongated, cylindrical ends 138 which are slidably supported within the lower ends of the tubular members 135, which construction permits the length of the side assemblies 134 and the table to vary as the vertically movable assemblies of the end units C and E are raised and lowered. This together with the fact that the upper end of the conveyor D is pivotally connected to the links 123 which links are in turn pivotally connected to the extensions 125 on the side plates 52 of the vertically movable assembly of the feed end unit C, allows the conveyor to function properly for any position of the apparatus.

With the exception of the fact that the upper roll 35' of the pinch rolls of the discharge end unit E continuously rides upon the belts 120, the discharge end unit E is similar in construction and operation to the upper roll 35 of the pinch rolls of the feed end unit C. In addition to being supported in a manner similar to the pinch rolls 34, 35 of the feed end unit C, the rolls 121, 35' of the discharge end unit E are driven in a similar manner from an electric motor 62' corresponding to the motor 62 of the feed end unit C. The motor 62' drives the belts 120 through the roll 121 and the construction is such that a sheet of veneer fed to the floating conveyor table D by

the belts 120 and discharged by the pinch rolls 122, 35' upon one of the decks 10, 11, 12, or 13 of the in-feed end of the veneer dryer A.

The vertically movable assembly of the discharge end unit E is counterbalanced in a manner similar to that in which the vertically movable assembly of the feed end unit C is counterbalanced and is adapted to be moved vertically by a discharge end unit, electrical hoist motor 100' corresponding to the hoist motor 100 and connected to the rolls of the vertically movable assembly in a similar manner to that in which the hoist motor 100 is connected to the corresponding assembly of the feed end unit C. The control for the motor 100', however, is different from the control for the motor 100. The control for the motor 100' is such that the vertically movable assembly of the discharge end unit E is automatically moved to sequentially discharge a sheet of veneer B from the floating table D onto the decks 10, 11, 12, 13, successively and to continuously repeat the cycle so long as the mechanism continues in operation. The movement of the vertical assembly of the discharge end unit E and the closing and opening of the pinch rolls 34, 35 are synchronized or timed with reference to the speed of movement of the decks of the dryer A by a synchronizing unit 140 comprising a cam-operated switch 141. The unit 140 is connected by a sprocket chain drive 142 to the front roller 17 of the lower deck 13 and since the conveyor rollers of all of the decks are driven at the same speed from the motor 30, the switch 141 is rotated in timed relation to the speed of the conveyor. The unit 140 preferably contains means for adjusting the time interval to provide for different length sheets, etc.

Referring to the wiring diagram, the apparatus is placed in operation by depressing the start push button switch 145 to close the normally open contacts 146, 147 thereof and establish a circuit from the power line 148 through the normally closed contacts 150, 151 of the stop push button switch 152, wire 153, the now closed normally open contacts 146, 147 of start push button switch 145, wire 154, normally closed overload contacts 155, 156, wire 157, normally closed overload contacts 158, 159, wire 160, and operating solenoid 161 to line 162. The overload contacts 155, 156, and 158, 159, the operating solenoid 161 and the wires 157, 160 are a part of a motor controller 163 for the motors 62, 62' which drive the pinch rolls and the table of the feeding apparatus. Energization of the operating solenoid 161 of the motor controller 163 closes the normally open contacts 164, 165 also forming a part of the motor controller which establishes a holding circuit around the start push button switch 145 which may now be released. Energization of the operating solenoid 161 also closes the normally open contacts 166, and 167, 168 and 169, 170 and 171 connecting the motors 62, 62' to the power lines 148, 162, 172 starting the motors 62, 62' which, in turn, drive the pinch rolls 34, 35 and the pinch rolls 122, 35' and the belts 120, respectively. The motors continue to operate until stopped by depressing the stop push button switch 152 to open its normally closed contacts and break the holding circuit for the solenoid 161. The start and stop push button switches 145, 152 may be positioned at any convenient location about the machine.

The vertically movable assembly of the feed end unit C may be manually raised or lowered by closing the normally open push button switches 114, 115 previously referred to. Closing normally open push button switch 114 closes its normally open contacts 175, 176 establishing a circuit from the line 148 through the now closed contacts 175, 176, wire 177, overtravel safety limit switch 178, wire 179, normally closed contacts 180, 181 of motor controller 182, wire 183, operating solenoid 184 of motor controller 182, wire 185, and normally closed overload contacts 186, 187 of motor controller 182. Energization of the operating solenoid 184 of motor con-

191, 192 and 193, 194 and 195, connecting the motor 100 to the power lines 148, 162, 172 in such a manner that the motor rotates in a direction to raise the vertically movable assembly of the feed end unit C. Simultaneously with the closing of the contacts 190 to 195, normally closed contacts 200, 201 are opened, which eliminates any possibility of the motor being accidentally connected to the power lines for rotation in an opposite direction by depressing the lowering push button switch 115. The motor 100 continues to rotate in a direction to raise the pinch rolls 34, 35, etc., as long as switch 114 is held closed or until the safety limit switch 178 opens.

The motor 100 is operated in the opposite direction to lower the vertically movable assembly of the feed end unit C by closing the switch 115 to close the normally open contacts 205, 206 thereof, thereby establishing a circuit from the line 148 through the switch 115, wire 207, down safety limit switch 208, wire 209, normally closed contacts 200, 20', of motor controller 182, wire 210, operating solenoid 211 of motor controller 182, wire 185', and overload contacts 186, 187 to line 162. Energization of the operating solenoid 211 closes the normally open contacts 212 and 213, 214 and 215, and 216 and 217 of motor controller 182, thereby connecting the hoist motor 100 to the power lines 148, 162 and 172 for rotation in the opposite direction; that is, in a direction to lower the movable assembly of the in-feed unit C. The motor continues to operate as long as the switch 115 is held closed or until the safety limit switch 208 opens.

With the motor 30 in operation and the conveyor mechanism or rollers of the decks of the dryer A in operation, the switch 141 forming a part of synchronizing unit 140 will be periodically closed. Assuming that the sheets of veneer being fed to the dryer are eight feet long, the switch 141 is preferably closed, once for each three and one-third feet of travel of the veneer or stock in the dryer. As the operator pushes a sheet of veneer between the pinch rolls 34, 35 and into engagement with the stop 36, the veneer actuates the limit switch 220 forming a part of the vertically movable assembly of the feed end unit C to close its normally open contacts 221, 222; however, nothing further happens until the switch 141 is operated to close normally open contacts 223, 224 thereof and open its normally closed contacts 225, 226. The opening of the normally closed contacts 225, 226 break a holding circuit for an operating solenoid 227 of a relay 228 having normally open contacts 229, 230 and normally closed contacts 231, 232, hereinafter more specifically referred to. The momentary closing of the normally open contacts 223, 224 of switch 141 establishes a circuit from the line 148 through the contacts 223, 224, wire 235, now closed contacts 221, 222 of limit switch 220, wire 236, and operating solenoid 237 of relay 238 to line 162.

Energization of operating solenoid 237 of relay 238 closes the normally open contacts 240 and 241, 242 and 243, 244 and 245 thereof. The closing of the normally open contacts 240, 241 of relay 238 establishes a holding circuit for the relay from the line 148 to the wire 235. The closing of the normally open contacts 242, 243 and 244, 245 of relay 238 connects the operating solenoid 246 of the solenoid valve which controls the flow of pressure fluid to and from the motors 84 to cause the valve to release the pressure fluid in the motor and allow the top roll 35 to drop into engagement with the veneer therebetween and the bottom roll 34. Simultaneously with the movement of the upper roll 35 into engagement with the veneer therethrough, the stop 36 is raised allowing the sheet of veneer to be fed by the pinch rolls onto the belts 120 of the floating conveyor table D.

The re-closing of contacts 225, 226 of switch 141 after being momentarily opened, establishes a circuit from the line 148 through the now closed contacts 225, 226 of switch 141, wire 250, normally closed contacts 231, 232

relay 253 to line 162. Energization of the operating solenoid 252 of relay 253 closes its normally open contacts 254, 255 establishing a circuit from the line 148 through the contacts 254, 255, wire 256, and operating solenoid 257 of relay 258 to line 162. Energization of the operating solenoid 257 of relay 258 closes its normally open contacts 260 and 261, 262 and 263. The closing of the normally open contacts 260, 261 of relay 258 establishes a circuit from the line 148 through the now closed contacts 225, 226 of switch 141, wire 250, now closed contacts 260, 261 of relay 258, wire 264, and operating solenoid 227 of relay 228 to line 162. The energization of the operating solenoid 227 of relay 228 closes the normally open contacts 229, 230 thereof and opens its normally closed contacts 231, 232. The closing of contacts 229, 230 establishes a holding circuit around the contacts 260, 261 of relay 258 from the wire 250 to the wire 264 and the opening of the normally closed contacts 231, 232 of relay 228 deenergizes the operating solenoid 252 of relay 253 allowing its normally open contacts 254, 255 to open which, in turn, deenergizes the operating solenoid 257 of relay 258.

The closing of normally open contacts 262, 263 of relay 258 establishes a circuit from the line 148 through the wire 265, normally closed contacts 266, 267 of selecting switch 268, wire 270, normally closed contacts 271, 272 of up travel, safety limit switch 273, wire 274, normally closed contacts 275, 276 of limit switch 277 connected to the frame of the discharge end unit E, wire 278, contacts 280, 281 of motor controller 282, wire 283, operating solenoid 284 of motor controller 282, wire 285, and overload contacts 286, 287 of motor controller 282 to line 162.

Energization of the operating solenoid 284 of motor controller 282 closes the normally open contacts 288 and 289, 290 and 291, 292 and 293, 294 and 295 and opens the normally closed contacts 296 and 297. The closing of the normally open contacts 288, 289 of motor controller 282 establishes a holding circuit for the operating solenoid 284 thereof around the contacts 262, 263, of relay 258 from the line 148 to the wire 265. The closing of the normally open contacts 290 and 291, 292 and 293, 294 and 295 of motor controller 282 connects the discharge end unit hoist motor 100' to the power lines 148, 162, 172 so that it operates in a direction to raise the vertically movable assembly of the discharge end unit E. The motor continues to operate and the unit to raise until limit switch 277 which is connected to the frame of the discharge end unit E is opened by an adjustable stop 298 carried by a rod 299 connected to the right-hand plate 52' of the discharge end unit E, there being one such stop for each of the intermediate decks of the dryer. The opening of the normally closed contacts 275, 276 of limit switch 277 breaks the circuit for the operating solenoid 284 of the motor controller 282 causing the motor to stop and the solenoid release brake associated therewith to be applied. The discharge end unit is now in position to discharge the sheet of veneer being fed to the table D onto the deck with which the pinch rolls 122, 35' thereof are now aligned; that is, deck 12 which is the second deck from the bottom.

When the sheet of veneer being fed passes through the feed or pinch rolls 34, 35 of the feed end unit C, the switch 220 which has held closed by the veneer operates to open its normally open contacts 221, 222, thus breaking the circuit for the operating solenoid 237 of relay 238 which, in turn, deenergizes the operating solenoid 246 of the solenoid valve, allowing pressure fluid to be again applied to the motors 84 to raise the top roll 35 and lower the stop 36. The sheet of veneer is fed onto the deck of the dryer at a considerably higher speed than that at which it travels through the dryer because the feeding mechanism feeds four decks successively

decks, the cycle of operations just described is repeated by the switch 141 being again operated instantaneously by the synchronizing mechanism. As the vertically movable assembly of the discharge end unit E reaches the third deck from the bottom; that is, deck 11, it is stopped by an adjustable stop 300 similar to the stop 298 previously referred to. When the vertically movable assembly reaches the top deck with the pinch rolls 122, 35' in alignment with the top deck 10 of the dryer A, a cam 301 on the frame of the discharge end unit E operates the selecting switch 268 to open the previously closed contacts 266, 267 thereof and close contacts 302, 303 of the selecting switch 268. Upon the next operation of the sequence switch 141 and the resultant closing of the normally open contacts 262, 263 of relay 258, as previously described, a circuit is established which causes the discharge unit hoist motor 100' to operate in a direction to lower the vertically movable assembly to its bottom position; that is, with the pinch rolls 122, 35' in alignment with the lower deck 13 of the dryer A. With the selecting switch 268 in the position just referred to, the closing of the normally open contacts 262, 263 of relay 258 establishes a circuit from the line 148 through the contacts 262, 263, wire 265, now closed contacts 302, 303 of selecting switch 268, wire 304, normally closed contacts 305, 306 of down travel safety limit switch 307, wire 308, normally closed contacts 296, 297 of motor controller 282, wire 309, operating solenoid 310 of motor controller 282, wire 285, and overload contacts 286, 287 to line 162, thereby energizing the solenoid 310 and closing the normally open contacts 311 and 312, 313 and 314, 315 and 316, 317 and 318 of motor controller 282. The closing of normally open contacts 311, 312 establishes a holding circuit for the operating solenoid 310 around the contacts 262, 263 of relay 258.

The closing of the normally open contacts 313 and 314, 315 and 316, 317 and 318 connects the discharge unit hoist motor 100' to the power lines 148, 162, 172 in such a manner that the motor rotates in a direction to lower the vertically movable assembly including the pinch rolls 122, 35'. The motor continues to operate and the assembly to descend until the assembly reaches the lower position, at which time the selecting switch 268 is again operated by a cam 319 on the frame of the discharge end unit to open contacts 302, 303 thereof to deenergize the operating solenoid 310 and stop the motor. Operation of the selecting switch 268 to open the contacts 302, 303 thereof causes contacts 266, 267 of the switch to subsequently close and reestablish the circuit so that the discharge unit hoist motor 100' will be operated in the reverse direction; that is, in the direction to raise the vertically movable assembly of the hoist unit E upon the next closing of the normally open contacts 262, 263 of relay 258 upon the subsequent actuation of the switch 141. The cycle of operations continues with the feeding mechanism delivering veneer to the decks of the dryer in sequence as long as the machine is continued in operation and veneer is introduced between the pinch rolls 34, 35 of the feed end unit C.

Provision is made for manually controlling the dropping of the upper pinch roll 35 in the form of a push button switch 320 comprising normally open contacts 321, 322, the closing of which establishes a circuit from the line 148 through the contacts 321, 322, wire 236, and operating solenoid 237 of relay 238 to the line 162. The discharge unit hoist motor 100' can be operated in either direction by the operation through the medium of push button switches 323, 324. When the push button switch 323 is operated to close its normally open contacts 325, 326, the operating solenoid 284 of motor controller 282 is energized and causes the motor to operate in a direction to raise the vertically movable assembly of the discharge end unit E. When the push button switch 324 is operated to close its normally open contacts 327, 328,

ergized and causes the motor to operate in a direction to lower the vertically movable assembly of the discharge end unit E.

While the invention has been herein illustrated and described as though a single row of veneer was being processed at one time, the usual practice is to process a plurality of [rolls] rows simultaneously, the number depending upon the width of the veneer sheets being treated and the width of the dryer, etc. It is also to be understood that the vertically movable assembly of the feed end unit C may be positioned at some convenient height above the floor and the veneer fed thereto in any suitable manner, either manually or automatically. Regardless of how the sheets of veneer are brought to and inserted between the pinch rolls 34, 35 of the feed end unit, the feed mechanism of the present invention will automatically feed veneer to a multiple deck dryer in predetermined sequence and in properly spaced relation with respect to the other veneer on the various decks.

In the alternative construction shown in Fig. 9, the floating table D and the discharge end unit E are omitted and the feed end unit C and the portion of track which supports the truck or trucks 32' in position for feeding the veneer to the feed end unit C are both mounted on a vertically movable platform or elevator 350. The elevator shown is of the hydraulic type operated by an electric motor driven pump and is moved vertically to align the pinch rolls 34, 35 of the feed end unit C with the particular deck 10, 11, 12, or 13 which it is desired to feed either manually or automatically in a manner similar to that in which the vertically movable assembly of the discharge end unit is aligned with the various decks previously described. The motor 62' is omitted, the motor, not shown, which operates the elevator 350 is substituted for the motor 100'.

Since the vertical movement of the elevator 350 and the entire unit C will correspond to the movement of the vertically movable assembly comprising end plates 52' of the discharge end unit E in the first described embodiment, the control switch 268 is attached to the assembly comprising the end plates 52, and the spaced stops 301, 319 for actuating the switch are appropriately attached to the frame of the conveyor decks 10 to 13, and operate the switch in manner described previously, when the elevator moves vertically. Likewise, the switches 273 and 277 are supported on the conveyor deck frame and are actuated by the stops 298, 300 attached to the rod 299 which is in turn attached to one of the end plates 52 of the pinch roll assembly and the stops cooperating with the switches control the position of the elevator to successively align the pinch rolls 34, 35 with the respective conveyor decks, and limits the upward elevation of the assembly. The safety downward travel limit switch 307 is attached to the lower part of the frame of the end unit C and cooperates with a stop 351 to discontinue operation of the pump motor similar to the manner in which it operates to stop elevator motor 100' in the first described embodiment.

In the form of the invention shown in Figs. 1 to 8, the vertically movable assembly of the discharge end unit E is moved vertically as the veneer sheets feed between the pinch rolls 34, 35. In the embodiment shown in Fig. 9, however, the veneer is fed directly from the pinch rolls to the conveyor decks and therefore the vertical movement of the elevator to align the pinch rolls with the next above conveyor deck must not occur until after the veneer has moved from the pinch rolls and prior to the feeding of a succeeding sheet therebetween. This action is accomplished by installing a normally closed switch in the wire 250 between the contacts 225, 226 of time switch 141 and contacts 231, 232 of the electromagnetic relay 228, which switch is opened by the solenoid 237 when it is energized by closure of the contacts 221, 222 of the veneer operated switch 220.

commodate the pinch rolls to the top position of the stack of veneer to be fed therethrough by manual operation of the push buttons 114, 115 as described hereinbefore, and at the same time, the vertical position of the elevator should be correspondingly adjusted to maintain the pinch rolls within their range of movement into alignment with the respective conveyor decks 10-13 by operation of the manual control push buttons 323, 324 as described hereinbefore.

From the foregoing it will be apparent that the objects heretofore enumerated and others have been accomplished and that there has been provided a novel and improved apparatus for feeding veneer to a multiple deck dryer, or, in fact any similar sheet material to a multiple deck machine in predetermined sequence and in predetermined spaced relation. While the preferred embodiment of the invention has been described with considerable detail, the invention is not limited to the particular construction shown and it is the intention to cover hereby all adaptations, modifications and uses thereof which come within the practice of those skilled in the art to which the invention relates and the scope of the appended claims.

Having thus described my invention, I claim:

1. In equipment for loading material in sheet form into a multiple deck conveyor type machine having power driven conveyor decks, the combination of a feed end unit to feed sheet material to said deck conveyors, said unit comprising a frame and a pair of pinch rolls, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, and means for automatically controlling the movement of said pinch rolls toward each other including a control device actuated by a sheet moving between said pinch rolls and a device operated at intervals proportional to the speed of the conveyor decks and cooperating with the first mentioned control device to initiate movement of said pinch rolls toward each other.

2. In equipment for loading material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame, a vertically movable assembly carried by said frame, manually controlled power means for moving said assembly vertically, a pair of pinch rolls carried by said assembly, means for producing relative movement of said pinch rolls toward and from each other, and means for automatically controlling the movement of said pinch rolls toward each other comprising a device actuated by a sheet moved between said pinch rolls and an intermittently operated device operated at predetermined intervals and cooperating with the first mentioned control device to initiate movement of said pinch rolls toward each other.

3. In equipment for loading material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame and a pair of pinch rolls, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, a conveyor type table having its feed end adjacent to said pinch rolls, a discharge end unit comprising a frame and a vertically movable assembly having the opposite end of said conveyor type table connected thereto for movement therewith, and means for moving said vertically movable assembly of said discharge end unit in timed relation to the relative movement of said pinch rolls toward and from each other.

4. In equipment for loading material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame and a pair of pinch rolls, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, a conveyor type table having its feed end adjacent to said pinch rolls, a discharge end unit comprising a frame and a vertically movable assembly including a pair of pinch rolls, means for pivotally connecting the discharge end of said conveyor type table

with, and means for moving said vertically movable assembly of said discharge end unit in timed relation to the relative movement of said pinch rolls toward and from each other.

5. In equipment for feeding material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame and a vertically movable assembly including a pair of pinch rolls, means for raising and lowering said assembly, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, a conveyor type table connected at one end to said vertically movable assembly for movement therewith, a discharge end unit comprising a frame and a vertically movable assembly having the opposite end of said conveyor type table connected thereto for movement therewith, and means for moving said vertically movable assembly of said discharge end unit in timed relation to the relative movement of said pinch rolls toward and from each other.

6. In equipment for feeding material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame and a vertically movable assembly including a pair of pinch rolls, means for raising and lowering said assembly, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, a conveyor type table connected at one end to said vertically movable assembly for movement therewith, a discharge end unit comprising a frame and a vertically movable assembly including a pair of pinch rolls, means for pivotally connecting the discharge end of said conveyor type table to said vertically movable assembly for movement therewith, and means for moving said vertically movable assembly of said discharge end unit in timed relation to the relative movement of said pinch rolls toward and from each other.

7. In equipment for feeding material in sheet form into a multiple deck conveyor type machine, the combination of a feed end unit comprising a frame and a vertically movable assembly including a pair of pinch rolls, means for raising and lowering said assembly, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, a conveyor type table connected at one end to said vertically movable assembly for movement therewith, a discharge end unit comprising a frame and a vertically movable assembly having the opposite end of said conveyor type table connected thereto for movement therewith, and means for moving said vertically movable assembly of said discharge end unit in timed relation to the relative movement of said pinch rolls toward and from each other, said last-named means comprising a control mechanism adapted to be operatively connected to the conveyor mechanism of said machine whereby said pinch rolls and said vertically movable assembly of said discharge end unit are moved in timed relation to the speed of the conveyor.

8. In equipment for loading material in sheet form into a multiple deck conveyor type machine, the combination of a feed unit comprising a frame, a vertically movable unit carried by said frame and including a pair of pinch rolls, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, and power means for moving said frame vertically a predetermined distance to move the pinch rolls from a sheet discharge position relative to one of the multiple decks of the machine to a sheet discharge position relative to an adjacent one of the multiple decks in timed relation to the relative movement of said pinch rolls toward and from each other.

9. In equipment for feeding material in sheet form into a multiple deck conveyor type machine, the combination of a feed unit comprising a frame, elevator means for supporting said frame, and means for moving said frame

ried by said frame and including a pair of pinch rolls, means for raising and lowering said assembly, means for driving said pinch rolls, means for producing relative movement of said pinch rolls toward and from each other, and means for actuating said elevator means to move said frame vertically in timed relation to the relative movement of said pinch rolls toward and from each other.

10. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven conveyor deck type machine, a sheet feeding mechanism including power driven elevating means shiftable vertically to direct sheet material into different ones of the multiple conveyor decks of the machine and pinch roll means for advancing a veneer sheet, [and] control means to intermittently initiate operation of said elevating means at intervals which are a function of the speed of the conveyor decks, [which] said control means [includes] including a control device operated in [synchronism] timed relation with the power driven conveyor decks, and means for intermittently operating said pinch roll means in timed relation to the vertical movement of said elevating means.

11. In equipment for loading sheet veneer material into a multiple power driven conveyor deck type machine from a stack of veneer sheets supported in spaced relation with respect to the machine, a sheet feeding mechanism including pinch roll means for advancing a veneer interposed between the stack of veneer sheets and the machine and power driven elevating means shiftable vertically to direct sheet material into different ones of the multiple [conveyor] decks of the machine, [and] electrical control means to intermittently initiate operation of said elevating means at intervals which are a function of the speed of the conveyor decks, [which] said electrical control means [includes] including an [electric] electrical switch opened and closed in [synchronism] timed relation with the power driven conveyor decks, and means for intermittently operating said pinch roll means in timed relation with said elevating means.

12. In equipment for loading sheet material into a multiple power driven conveyor deck type machine, a power driven sheet feeding unit operative to move sheets toward the machine, and control means for said sheet feeding unit comprising a control device actuated by a sheet moved into feeding position with respect to said sheet feeding unit and a control device operated in synchronism with the driven conveyor decks of the machine and cooperating with the first mentioned control device at intervals proportional to the speed of the conveyor decks to render said sheet feeding unit operative.

13. In equipment for loading sheet material into a multiple power driven conveyor deck type machine, a power driven pinch roll mechanism operative to move sheets toward the machine, and control means to intermittently render said pinch roll mechanism operative comprising a control device actuated by a sheet moved to feed position relative to said pinch roll, a control device operated in synchronism with the driven conveyor decks of the machine and cooperating with the first mentioned control device at intervals proportional to the speed of the conveyor decks to render said pinch roll mechanism operative.

14. In equipment for loading sheet veneer material into a multiple power driven deck conveyor type machine from a stack of veneer sheets supported in spaced relation with respect to the machine, the combination of a power operated sheet feeding mechanism including pinch roll means for advancing a sheet of veneer interposed between the stack of veneer sheets and the machine, power means for moving said sheet feeding mechanism into sheet feeding alignment with the respective conveyor decks, and control means for actuating said power operated sheet feeding mechanism and said power means in [synchronism] timed relation, said control means including a device operating in [synchronism] timed relation with the

15. In equipment for loading sheet material into a multiple conveyor deck type machine, the combination of a frame, a sheet feeding unit carried by said frame for vertical movement, power actuated means for moving said sheet feeding unit, a second frame spaced from the first mentioned frame and adjacent to the multiple deck conveyor machine, a sheet discharge unit carried by said second frame for vertical movement to discharge sheets onto any of the multiple decks of the conveyor machine, a sheet conveyor structure connected at one end with said sheet feeding unit and at the other end with said sheet discharge unit and operative to transfer sheets from said sheet feeding unit to said sheet discharge unit, and automatically controlled power actuated means to raise and lower said sheet discharge unit.

16. In equipment for loading sheet material into a multiple conveyor deck type machine, the combination of a frame, a sheet feeding unit carried by said frame for vertical movement, power actuated means for moving said sheet feeding unit, a second frame spaced from the first mentioned frame and adjacent to the multiple deck conveyor machine, a sheet discharge unit carried by said second frame for vertical movement to discharge sheets onto any of the multiple decks of the conveyor machine, a telescoping sheet conveyor structure connected at one end with said sheet feeding unit and at the other end with said sheet discharge unit and operative to transfer sheets from said sheet feeding unit to said sheet discharge unit, and automatically controlled power actuated means to raise and lower said sheet discharge unit, said telescoping conveyor structure being shortened as said units approach a common level and lengthening when said units move from a common level.

17. In equipment for loading material in sheet form into a multiple deck power driven conveyor type machine, the combination of vertically movable feed means having an entering end and a discharge end, said feed means including a pair of pinch rolls, means for driving said pinch rolls, power actuated means for vertically moving said entering end of said feed means, power actuated means for producing relative movement of said pinch rolls toward and from each other, and automatically controlled power actuated means for moving said discharge end of said feed means vertically in timed relation to the relative movement of said pinch rolls relative to each other.

18. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven conveyor deck type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, a sheet feeding mechanism including power driven elevating means shiftable vertically to direct sheet material into different ones of the multiple conveyor decks of the machine and pinch roll means intermediate the stack of veneer sheets and the machine for advancing a veneer sheet, means for producing relative movement between said means for supporting the stack of veneer sheets and said pinch roll means whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means, control means to intermittently initiate operation of said elevating means at intervals which are a function of the speed of the conveyor decks, said control means including a control device operated in timed relation with the power driven conveyor decks, and means for intermittently operating said pinch roll means in timed relation to the vertical movement of said elevating means.

19. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven conveyor deck type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, a sheet feeding mechanism interposed between the stack of veneer sheets and the machine and having a feed end and a discharge end, said sheet feeding mechanism

ends and including power driven elevating means for shifting said discharge end vertically to direct sheet material into different ones of the multiple conveyor decks of the machine, means for producing relative movement between said means for supporting the stack of veneer sheets and said feed end of said sheet feeding mechanism whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means at said feed end of said sheet feeding mechanism, control means to intermittently initiate operation of said elevating means at intervals that are a function of the speed of the conveyor decks, and means for actuating said pinch roll means adjacent to said feed end in timed relation to the vertical movement of said discharge end.

20. In equipment for loading sheet veneer material into a multiple power driven conveyor type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, a sheet feeding mechanism including pinch roll means for advancing a veneer interposed between the stack of veneer sheets and the machine and power driven elevating means shiftable vertically to direct sheet material into different ones of the multiple decks of the conveyor machine, means for producing relative movement between said means for supporting the stack of veneer sheets and said pinch roll means whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means, electrical control means to intermittently initiate operation of said elevating means at intervals which are a function of the speed of the conveyor decks, said electrical control means including an electrical switch open and closed in timed relation with the power driven conveyor decks, and means for intermittently operating said pinch roll means in timed relation with said elevating means.

21. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven conveyor deck type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, a sheet feeding mechanism interposed between the stack of veneer sheets and the machine and having a feed end and a discharge end, said sheet feeding mechanism comprising pinch roll means adjacent to each of said ends and including power driven elevating means for shifting said discharge end vertically to direct sheet material into different ones of the multiple conveyor decks of the machine, means for producing relative movement between said means for supporting the stack of veneer sheets and said feed end of said sheet feeding mechanism whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means at said feed end of said sheet feeding mechanism, electrical control means to intermittently initiate operation of said elevating means at intervals that are a function of the speed of the conveyor decks, said electrical control means including an electric switch opened and closed in timed relation with the power operated conveyor decks, and means for actuating said pinch roll means adjacent to said feed end in timed relation to the vertical movement of said discharge end.

22. In equipment for loading sheet veneer material into a multiple power driven conveyor type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, the combination of a power operated sheet feeding mechanism including pinch roll means for advancing a sheet of veneer interposed between the stack of veneer sheets and the machine, power means for moving said sheet feeding mechanism into alignment with the respective conveyor decks, means for producing relative movement between said means for supporting the stack of veneer sheets and said pinch roll means whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said

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actuating said pinch roll means in timed relation with the movement of said sheet feeding mechanism into alignment with the respective conveyor decks.

23. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven deck conveyor type machine, means for supporting a stack of veneer sheets in spaced relation with respect to the machine, the combination of a power operated sheet feeding mechanism interposed between the stack of veneer sheets and the machine and having a feed end adjacent to the stack of veneer sheets and a discharge end adjacent to the machine, said sheet feeding mechanism comprising pinch roll means adjacent to each of said ends, power means for moving said discharge end of said sheet feeding mechanism into alignment with the respective conveyor decks, means for producing relative movement between said means for supporting the stack of veneer sheets and said feed end of said sheet feeding mechanism whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means at said feed end of said sheet feeding mechanism, and control means for intermittently actuating said pinch roll means in timed relation with the movement of said discharge end of said sheet feeding mechanism into alignment with the respective conveyor decks.

24. In equipment for loading sheet veneer material from a stack of veneer sheets into a multiple power driven deck conveyor type machine, the combination of a multiple deck driven conveyor section in advance of the machine, means for supporting a stack of veneer sheets in spaced relation with respect to said conveyor section, a power operated sheet feeding mechanism comprising pinch roll means intermittently operable to advance a veneer sheet interposed between the stack of veneer sheets and said conveyor section, power means for selectively producing relative vertical movement between said means for supporting said stack of veneer sheets and said pinch roll means whereby substantial alignment may be maintained between the top of the stack of veneer sheets and said pinch roll means, power means

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for producing relative vertical movement between said sheet feeding mechanism and said conveyor section in opposite directions to align said sheet feeding mechanism with the respective decks of said conveyor section, and means for operating said pinch roll means in timed relation with the relative movement between said sheet feeding mechanism and the decks of said conveyor section.

25. In equipment for loading veneer sheets into a machine of the type having a plurality of separate power-driven conveyor decks arranged vertically above one another, a sheet-feeding mechanism having a feed end and a discharge end, said sheet-feeding mechanism being aligned in direction of feeding movement with the direction of feeding movement of said conveyor decks and having its discharge end adjacent thereto, power-driven elevating means for shifting the discharge end of said mechanism vertically in intermittent steps into horizontal alignment successively with said conveyor decks, said sheet-feeding mechanism including pinch roll means for advancing a veneer sheet, means intermittently to actuate said elevating means at intervals which are a function of the speed of said conveyor decks including a control device operated in timed relation with said conveyor decks, and means for intermittently operating said pinch roll means during the intervals between successive steps of movement of said elevating means whereby successive veneer sheets presented to said pinch roll means are advanced along said sheet-feeding mechanism onto successive ones of said conveyor decks.

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March 3, 1959

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SHEET LOADING MECHANISM FOR MULTIDECK CONVEYOR

Filed May 5, 1958

4 Sheets-Sheet 2

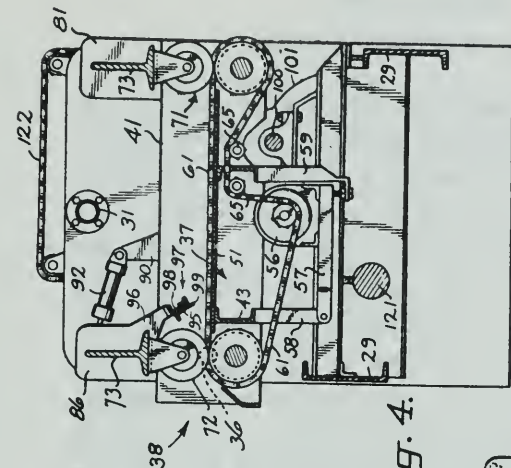


Fig. 4.

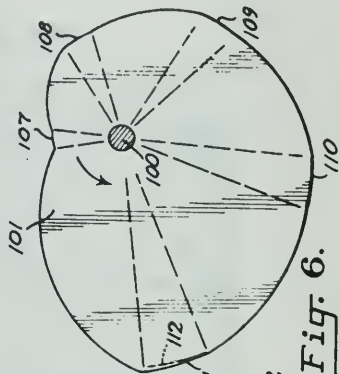


Fig. 6.

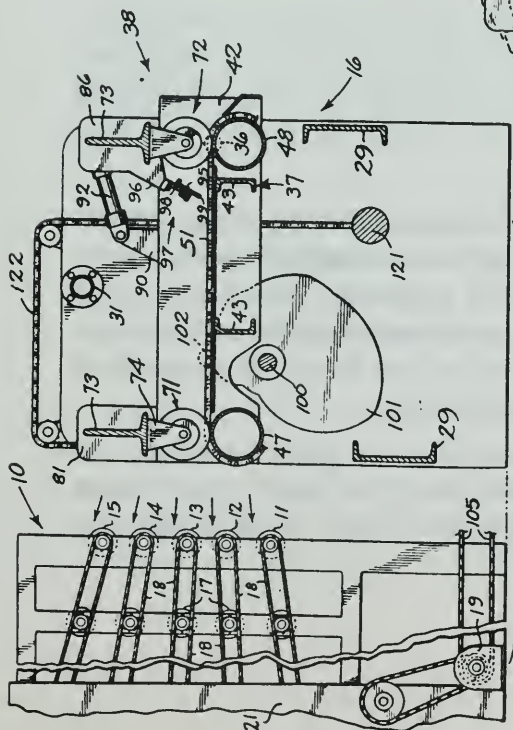


Fig. 3.

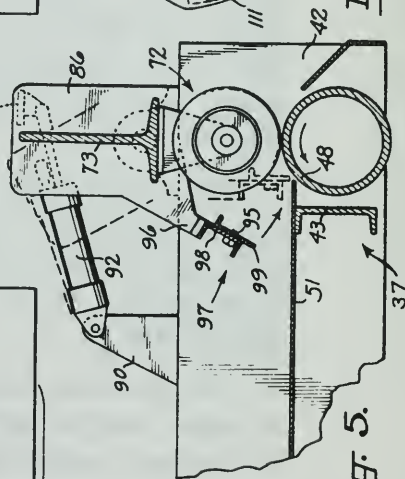


Fig. 5.

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35 U.S.C. § 251:**“Reissue of defective patents**

“Whenever any patent is, through error without any deceptive intention, deemed wholly or partially inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Commissioner shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue.

“The Commissioner may issue several reissued patents for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued patents.

“The provisions of this title relating to applications for patent shall be applicable to applications for reissue of a patent, except that application for reissue may be made and sworn to by the assignee of the entire interest if the application does not seek to enlarge the scope of the claims of the original patent.

“No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.”

35 U.S.C. § 252:**"Effect of reissue**

"The surrender of the original patent shall take effect upon the issue of the reissued patent, and every reissued patent shall have the same effect and operation in law, on the trial of actions for causes thereafter arising, as if the same had been originally granted in such amended form, but in so far as the claims of the original and reissued patents are identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the reissued patent, to the extent that its claims are identical with the original patent, shall constitute a continuation thereof and have effect continuously from the date of the original patent.

"No reissued patent shall abridge or effect the right of any person or his successors in business who made, purchased or used prior to the grant of a reissue anything patented by the reissued patent, to continue the use of, or to sell to others to be used or sold, the specific thing so made, purchased or used, unless the making, using or selling of such thing infringes a valid claim of the reissued patent which was in the original patent. The court before which such matter is in question may provide for the continued manufacture, use or sale of the thing made, purchased or used as specified, or for the manufacture, use or sale of which substantial preparation was made before the grant of the reissue, and it may also provide for the continued practice of any process patented by the reissue, practiced, or for the practice of which substantial preparation was made, prior to the

grant of the reissue, to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the grant of the reissue."